SEPTEMBER 1, 1950

MODERN MEDICINE

The Journal of Diagnosis and Treatment

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'Round-the-clock relief from 4 small doses

Decapryn's *long-lasting relief*,[1] combined with *low milligram dosage*,[2] makes it the ideal antihistamine for treating difficult allergies, or patients who have not responded to other drugs.

1. "Symptoms were relieved from 4 to 24 hours after the administration of a single dose of Decapryn—"... Sheldon, J.M. Et al: Univ. Mich. Hosp. Bull. 14:13-15 (1948)
2. "It was found that 12.5 mg. could be given during the day with comparatively few side reactions and yet maintain good clinical results—"... MacQuiddy, E.L.: Neb. State M.J. 34:123 (1949)

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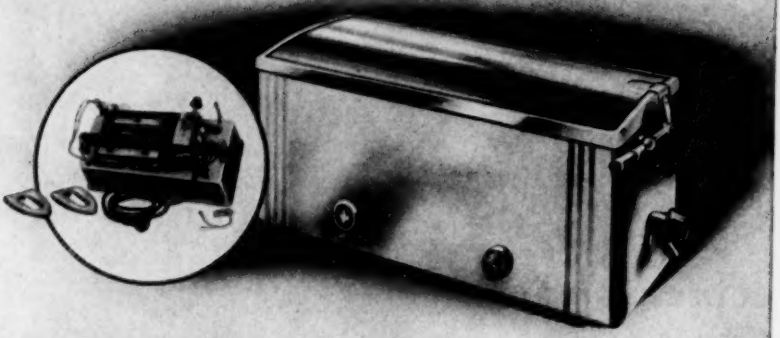

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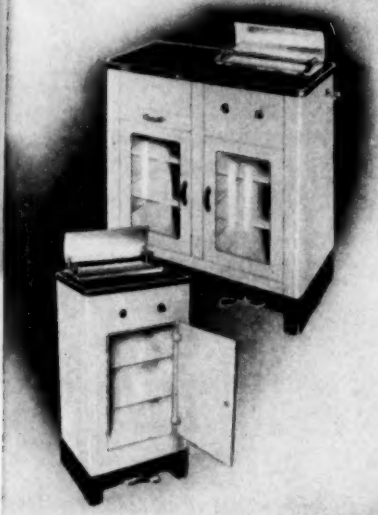

are automatically burn-out-proof . . . another widely acclaimed feature that assures long, satisfactory life of the unit and constant protection for immersed instruments. IF WATER BECOMES EXHAUSTED beyond a critical level, permanent cut-off of electric current occurs automatically. Operation can only be resumed by replenishing water in the chamber and manually switching on current again.

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A woman, aged 69 years, "complained of obstinate constipation of lifelong duration...She was given 4 tablets of methylcellulose [Cellothyl] before meals and at bedtime and in about a week she began having soft stools and two weeks later she reported that she was having the most satisfactory bowel function that she could ever remember."

. . . one of the cases reported recently[1] where a "striking change for the better" followed administration of Cellothyl. Cellothyl was also found highly effective in "a large number" of the author's patients who were suffering with severe obstinate constipation: "they had taken quantities or as some of them said 'barrels of laxatives'" without relief until Cellothyl was prescribed.

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1. Bargen, J. A.: Gastroenterology **13**:275 (Oct.) 1949.

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MODERN MEDICINE

THE JOURNAL OF DIAGNOSIS AND TREATMENT

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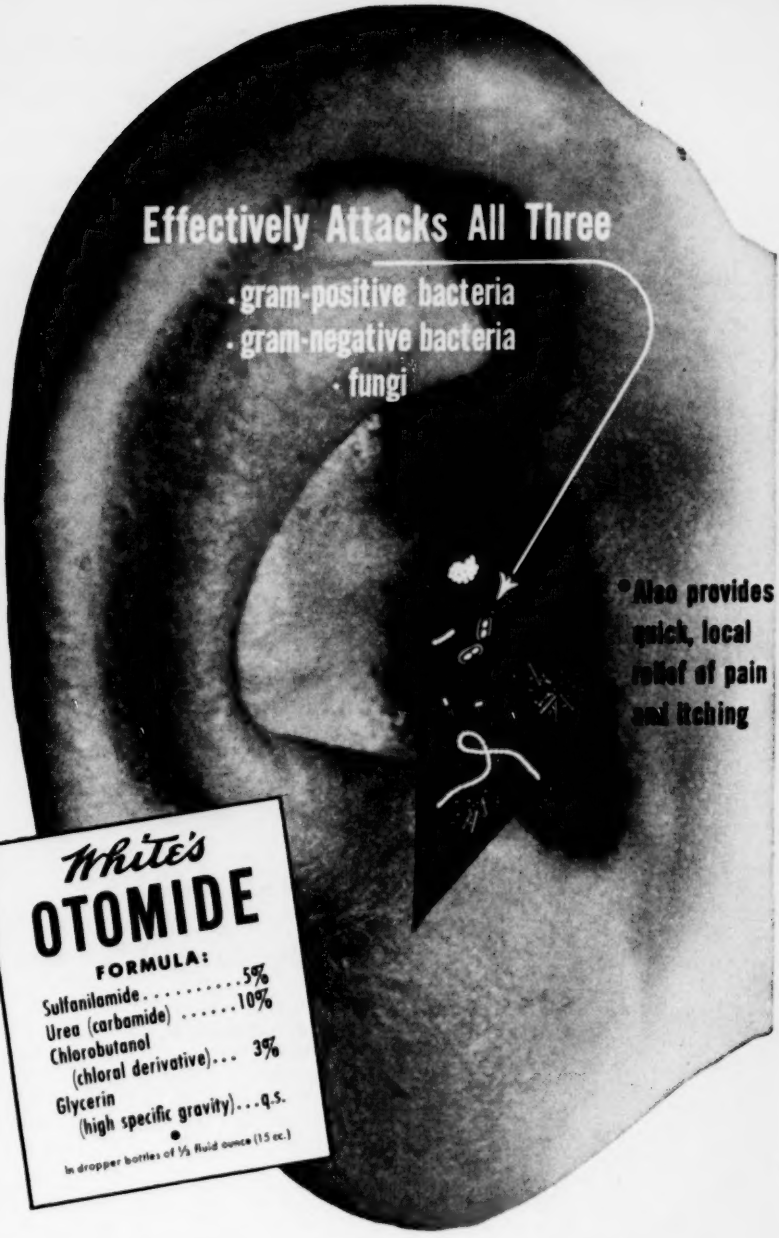

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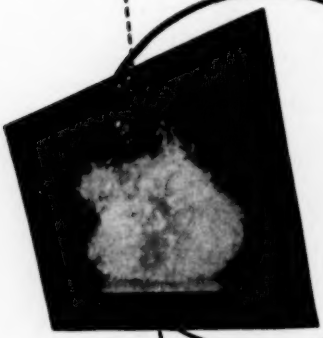

Every physician should see this!

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Each Syntrogel tablet contains aluminum hydroxide, calcium carbonate, magnesium peroxide and Syntropan® 'Roche.'

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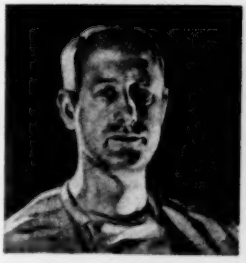
Contents for September 1 1950

MODERN MEDICINE
VOL. 18, NO. 17



THE MAN ON THE COVER is Dr. Richard H. Overholt, Clinical Professor of Surgery at Tufts College, Boston. He is Consulting Thoracic Surgeon for the Barnstable County Sanatorium, Pocasset; the Bristol County Tuberculosis Hospital, Attleboro; the Essex County Tuberculosis Hospital, Middleton; the New Hampshire State Sanatorium, Glencliff, N. H.; the State Sanatorium, Wallum Lake, R. I., and is a member of the surgical staffs of the Joseph H. Pratt Diagnostic, New England Baptist, and New England Deaconess hospitals in Boston. He is co-author, with Dr. Leo J. Kenney of Tufts College, of the article reviewed on page 50 of this issue, "One-Stage Costoversion Thoracoplasty."

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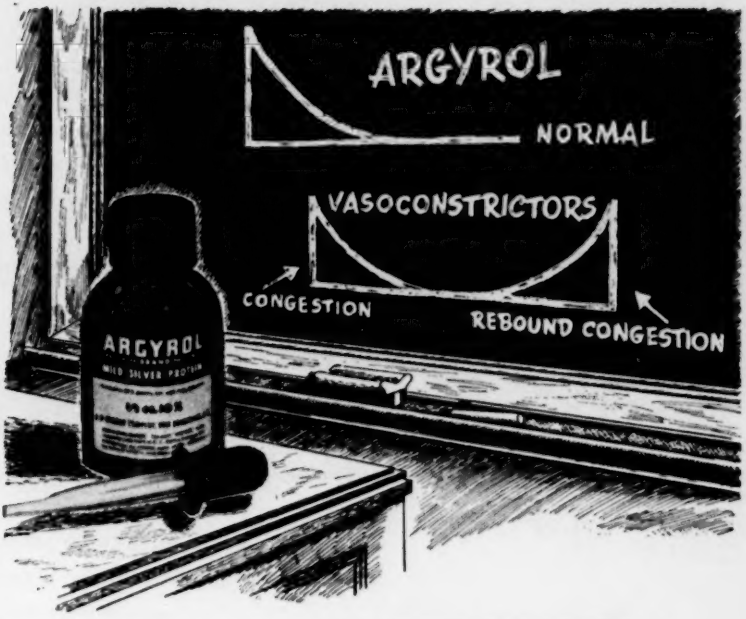
CONTINUED

MODERN MEDICINE, The Journal of Medical Progress, is published twice monthly on the first and fifteenth of each month at Minneapolis, Minn. Subscription rate: $5.00 a year, 25c a copy. Business Manager: M. E. Hertz. Address editorial correspondence to 84 South 10th Street, Minneapolis 3, Minn. Telephone: Bridgeport 1291. ADVERTISING REPRESENTATIVES: New York 17: Lee Klemmer, George Doyle, Bernard A. Smiler, 30 East 42nd Street, Suite 401. Telephone: Murray Hill 2-8717. CHICAGO 6: Jay H. Hertz, 20 North Wacker Drive, Suite 1921. Telephone: Central 6-4619. SAN FRANCISCO 4: Duncan A. Scott & Co., Mills Bldg. Telephone: Garfield 1-7950. LOS ANGELES 5: Duncan A. Scott & Co., 2978 Wilshire Blvd. Telephone: Dunkirk 8-4151.



In Para-nasal Infections **ARGYROL** **provides**

a comeback . . . not a bounce

ARGYROL is bacteriostatic, demulcent, detergent and decongestant—all essential actions. Equally important, ARGYROL decongests without rebound congestion. It does not establish the vicious cycle of Rhinitis Medicamentosa so often associated with vasoconstrictor use.

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1. Decongests without irritation to the membrane and without ciliary injury.
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ARGYROL *the medication of choice in treating para-nasal infection.*

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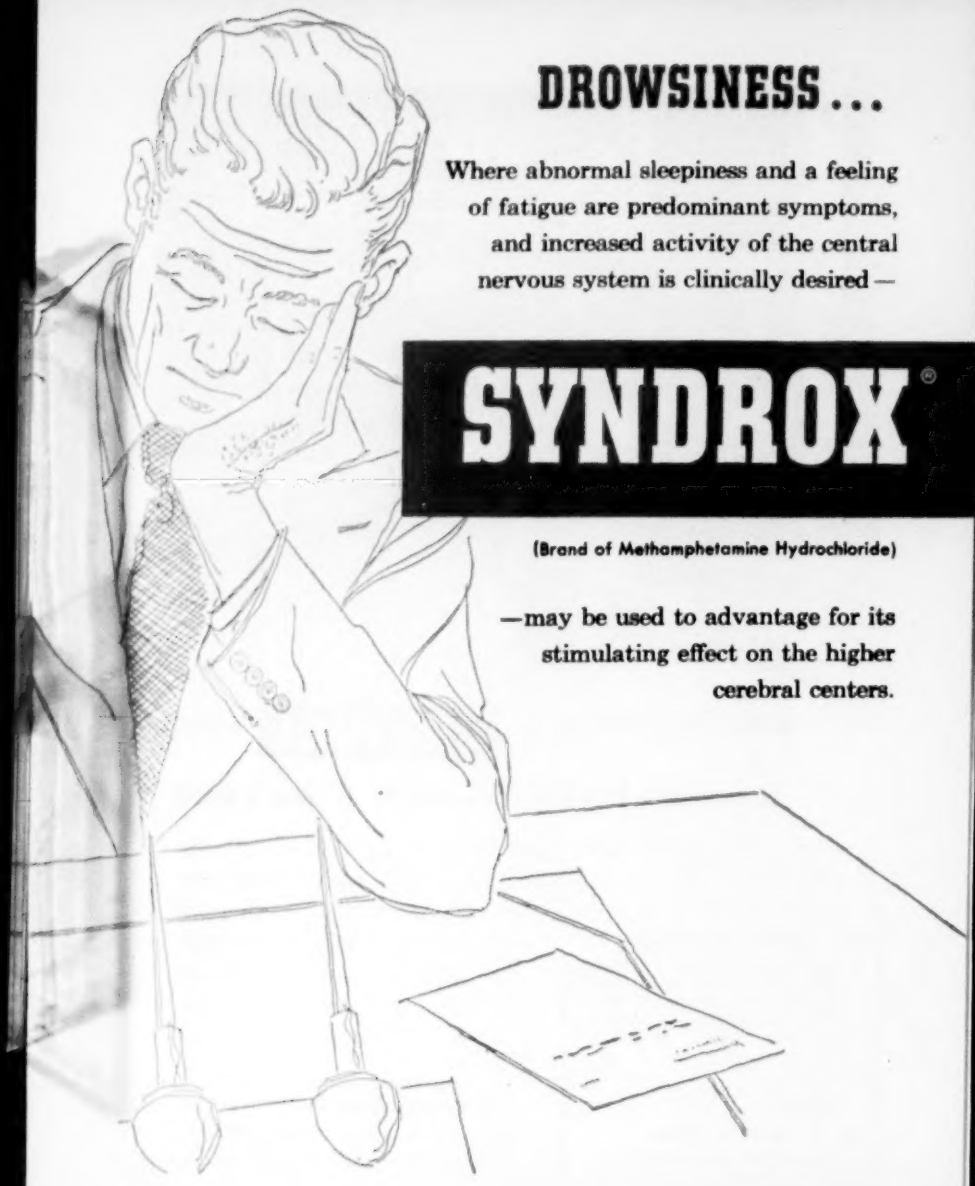

DROWSINESS . . .

Where abnormal sleepiness and a feeling of fatigue are predominant symptoms, and increased activity of the central nervous system is clinically desired—

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SYNDROX . . .

imparts a sense of increased energy and efficiency . . .
elevates the mood (produces euphoria) . . .
counteracts sleepiness and sense of weariness . . .
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IN NARCOLEPSY...IN HYPOTENSION

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Supplied in 5 mg. tablets (scored, green)—bottles of 100 and 1000. Also available in a pleasant-tasting, amber elixir; each 30 cc. (1 fl. oz.) contains 20 mg.—pints and gallons. Caution: Use only as suggested.

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LETTER FROM THE EDITOR

Dear Reader:

The September 15 issue of *Modern Medicine* will bring you two bonus features, a Special Exhibit and a Book Chapter.

The Special Exhibit is condensed from the scientific exhibit of Drs. J. M. Carlisle, A. Gibson, and E. Schmatolla which was presented at the American Medical Association meeting in San Francisco and which was awarded a Certificate of Merit for excellence of correlating facts and of presentation. Its title is "Cortisone: Pharmacology and Clinical Use."

Only a few thousand of you were able to see the exhibit at San Francisco, but every member of the medical profession will have an opportunity to bring himself up to date on cortisone with the next issue of *Modern Medicine*.

The second bonus feature is a book that took years in the writing and one that will be the definitive work on its subject for years to come. It is *Peptic Ulcer* by Drs. A. C. Ivy, M.I. Grossman, and W. H. Bachrach. The more than 1,000 pages have been carefully summarized in the authors' own words to bring out the essential known facts of etiology, diagnosis, and treatment, both medical and surgical. *Peptic Ulcer* is one of the most important medical books of the year, and one about which you will want to be informed.

These two extra features will be brought to you at no sacrifice of the usual contents. The Editorial Committee has made arrangements to include all the regular departments and reports which you have come to expect in *Modern Medicine* and, in addition, the two bonus features.

The September 15 issue thus is to be one you will want to read and reread. Make a note on your desk pad today, to peruse your next copy of *Modern Medicine* the day it arrives.

EDITOR

Aureomycin

AUREOMYCIN
CRYSTALLINE

for complications following Acute Infections in Childhood

Now is the season for children to enter upon their scholastic labors, and in most communities to receive either primary, or booster, immunization against several of the common childhood infections. Reliance must be placed upon antibiotics to control the secondary invaders which may follow these infections. Pediatricians are increasingly turning to aureomycin for this purpose, because of its wide range of activity against the common Gram-positive and Gram-negative organisms.

Aureomycin is also indicated for the control of the following infections:

Acute amebiasis, bacterial infections associated with virus influenza, bacterial and virus-like infections of the eye, bacteroides septicemia, boutonneuse fever, brucellosis, chancroid, Friedländer infections (Klebsiella pneumonia), gonorrhea (resistant), Gram-negative infections (including those caused by some of the coli-aerogenes group), Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, peritonitis, pertussis infections (acute and subacute), primary atypical pneumonia, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, sinusitis, subacute bacterial endocarditis resistant to penicillin, surgical infections, tick-bite fever (African), tularemia, typhus and the common infections of the uterus and adnexa.

Capsules: Bottles of 25, 50 mg. each capsule. Bottles of 16, 250 mg. each capsule.
Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

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AMERICAN Cyanamid COMPANY
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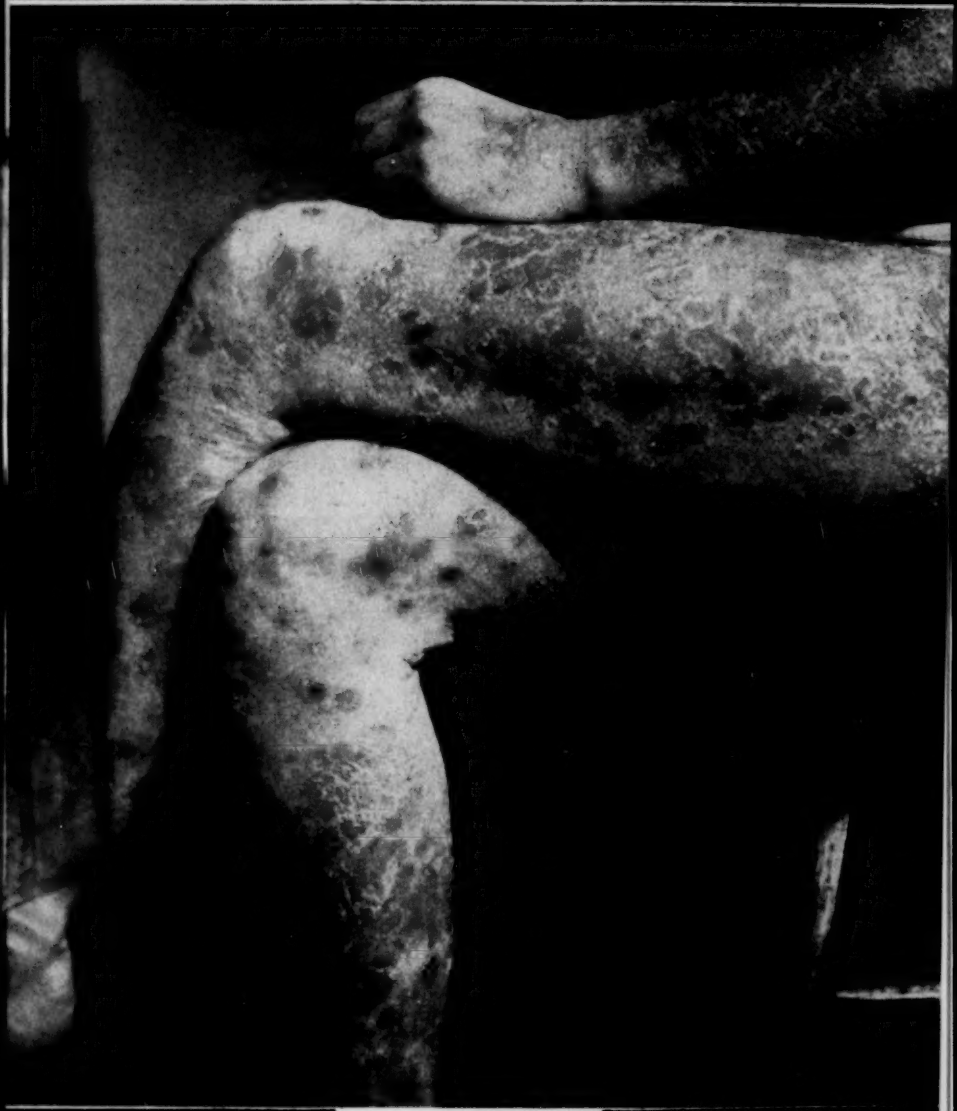

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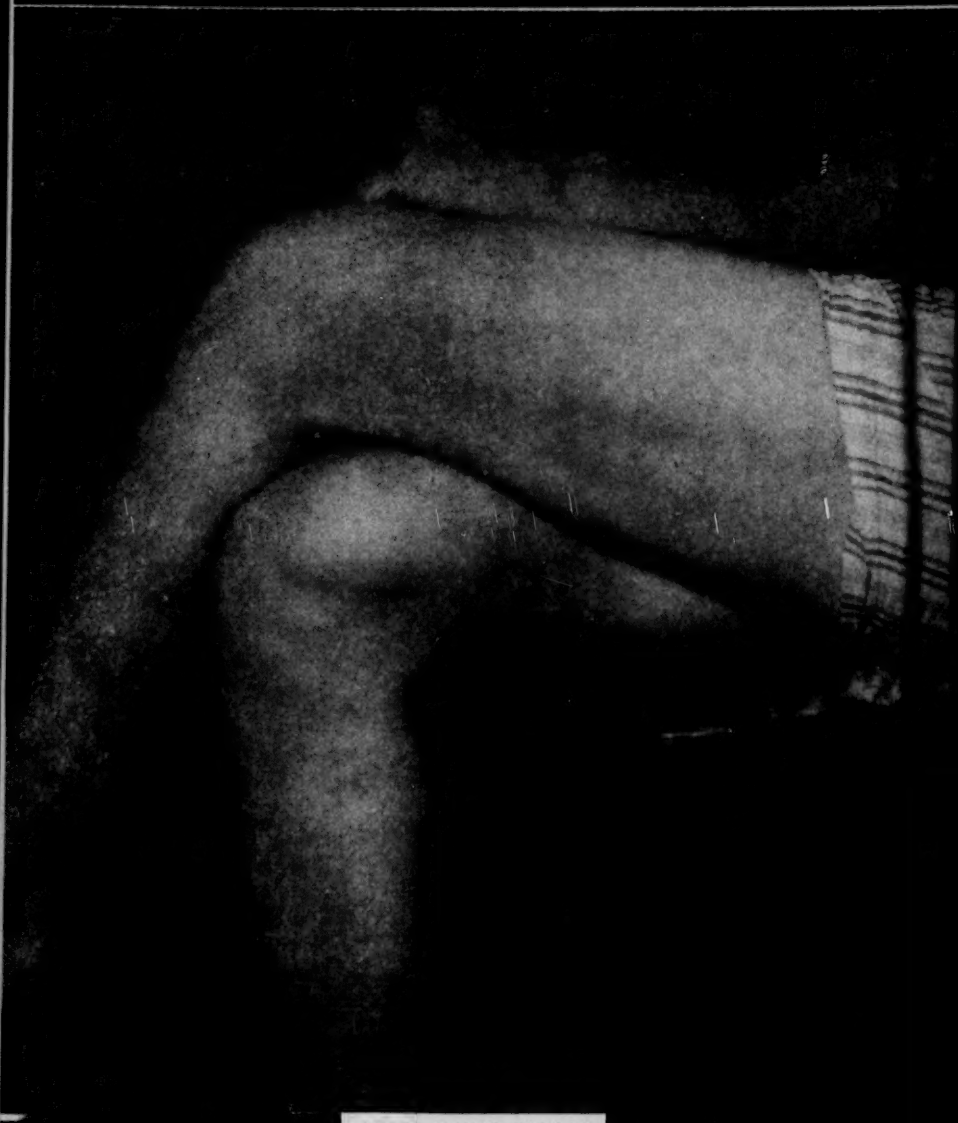

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Correspondence

Communications from the readers of MODERN MEDICINE *are always welcome. Address communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Scintillating Scotoma

TO THE EDITORS: There is so little in the literature on scintillating scotoma that I thought my experience with this annoying symptom worth recording.

I have been troubled with it for the past two or three years. At first the attacks came on every three or four months and lasted twenty or thirty minutes. There is a dazzling, scintillating light that is not painful but very annoying. I cannot read while it lasts. Slight dull headaches accompany the attacks. Scotomata are visible from either eye. The scintillation is usually in the right field of vision, just above center. It is visible with my eyes closed but it is not quite so disagreeable that way.

I am at a loss to know just what causes these attacks. I am eighty-three years old and the fact that cataracts are developing in each eye makes me wonder if there is any connection between the attacks and the cataracts. My vision has been gradually failing for the past two years and now with correcting glasses is 20/40. The attacks are increasing in frequency but are otherwise the same.

C. W. BANNER, M.D.
Greensboro, N.C.

Blind from Electric Shock

TO THE EDITORS: I cannot agree with your consultant in neurology that the optic neuritis described is unrelated to an electric shock accident sustained by the patient five years before the symptoms were first noted (*Modern Medicine*, July 1, 1950, p. 24).

In May 1922, a patient suffered a severe electric shock with burns of face and eye. Three months later he was blind in the right eye; the left eye was 20/20. In August 1927 he had an opacity of lens in the left eye. By May, he was totally blind, with no light perception in either eye.

The man received an award of total disability in the Connecticut compensation court in 1930. The connection must be obvious.

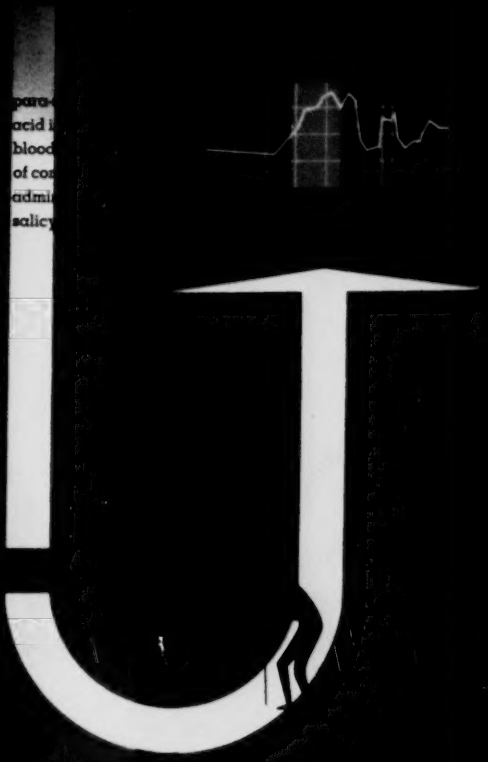
WILLIAM F. REARDON, M.D.
Hartford, Conn.

The Fisherman's Tale

TO THE EDITORS: I read your excellent magazine from cover to cover, advertisements included. The articles are so concise and practical that I figure I get a lot of information with the least amount of time and effort.

Let me say I enjoyed "Letter

Pabalate produces higher blood salicylate levels



is given many effective salicylate therapy, particularly in cases resistant to the maintenance of blood levels requisite for clinical response.

Each enteric-coated Pabalate Tablet, or each teaspoonful of the chocolate-flavored Pabalate Liquid, contains sodium salicylate, U.S.P. (5 gr.) 0.3 Gm.; para-aminobenzoic acid, as the sodium salt, (5 gr.) 0.3 Gm.

better antirheumatic therapy

PABALATE®

the dependable antirheumatic—available in both tablets and liquid, for more convenient administration to patients of all ages!

1. Rosenblum, H. and Fraser, L. E.: Proc. Soc. Exper. Biol. and Med., 65: 178, 1947.
2. Dry, T. L., et al.: Proc. Staff Meetings Mayo Clin., 21: 497, 1946.
3. Beilale, M.: Union Med. Can., 77: 392, 1948.

Robins

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ETHICAL PHARMACEUTICALS OF MERIT SINCE 1878

from the Editor" (*Modern Medicine*, June 15, 1950, p. 18) regarding the cartoon and fish shanty episode and have pasted it in my scrapbook.

I would like to relate a couple of amusing incidents which occurred to me in relation to the fish shanty with the cartoon done by your Scott Taber painted on its side. I was on vacation in New Orleans when the issue of *Life* containing the picture came out in February. I showed the picture to the ticket agent when I made reservations for a flight to Cuba and on arrival at the airport two days later this same young lady told me my plane had just departed but she recognized me and said, "You are the doctor whose picture is in *Life*?"

I said, "Yes," and she said, "I think we can get that plane to return for you."

She wirelessed the plane and it returned and picked me up.

Then when I returned from Cuba to New Orleans I had to pass immigration officials' inspection and I did not have my birth certificate or naturalization papers with me. Consequently they detained me. I showed them my AMA membership, several fraternity and Kiwanis cards but they said, "That does not prove that you are an American citizen."

So I said, "If I can show you my picture in a national magazine will you let me in the U.S.A?"

They answered in the affirmative and on seeing the picture in *Life* with Mr. Taber's cartoon and my likeness, they laughingly admitted me.

O. W. MITTON, M.D.
East Tawas, Mich.

Cortical Remnants after Cataracts

TO THE EDITORS: The intracapsular extraction of a cataract is an ideal cataract operation. It prevents the development of a secondary cataract. A round black pupil without remnants results.

Not all cataracts, however, can be removed with their capsules. The intumescent cataracts, for example, are best removed by extracapsular operation. Cortical parts often remain in the anterior or posterior chamber or in the pupil. Normally they can be easily removed by expression.

Sometimes, however, particularly in older patients, the cornea becomes concave because of hypotonia after a cataract extraction. If cortical remnants are left in such a case, the expression may be impossible.

Some surgeons advocate the irrigation of the anterior chamber. The tip of a specially designed syringe is introduced between the lips of the wound and irrigating liquid injected. When irrigation is employed, caution is necessary. No strong antiseptic solution should be used, certainly never bichloride of mercury, which will induce staining of the cornea. However, even when a sterile, nonirritating fluid is used for irrigation, danger still exists. If the end of a syringe is introduced into the anterior chamber, infection may also be introduced because the conjunctival sac can never be properly sterilized. For that reason, many eye surgeons do not irrigate the anterior chamber after cataract operation.

For many years I have used the following procedures in these cases: I press the sclera on the nasal side

in the equator by fixing the forceps until the cornea is no longer concave, but convex. At the same time I express the remnants by pressing on the lower margin of the cornea and adjacent sclera with the Daviel's spoon, as usual. This is a very simple and easy procedure and always gives satisfactory results.

EDMUND CARTER-ROSENHAUCH, M.D.
New York City

Status of Chiropody

TO THE EDITORS: I read with interest Dr. Joseph E. Brown's article entitled "Practical Foot Problems" (*Modern Medicine*, Apr. 15, 1950, p. 84).

The following statement appears at the beginning of the paper: "One person in 3 has painful feet and claims to be 'doing something about it.' Unfortunately, most rely on self-treatment with appliances sold in drugstores or with shoes having built-in features suggested by shoe salesmen, or consult chiropodists."

It is rather unfortunate that the paper includes the statement that consultation with chiropodists is "unfortunate." I shall attempt in this letter to correct what appears to be an error in evaluation of our profession. This error is possibly due to unfamiliarity with the modern profession of chiropody.

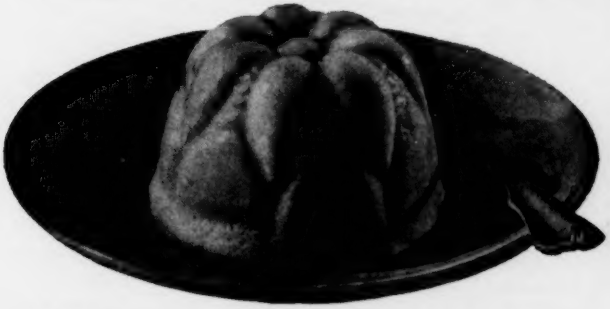
First, let me quote from the Judicial Council of the American Medical Association:

Chiropody is a practice ancillary—a hand-maiden—to medical practice in a limited field. . . . General opinion seems to be that chiropody fairly well satisfies a gap that the [medical] profession has failed to fill.

An excerpt from a recent discussion relating to chiropody by the

(Continued on page 26)

A Valuable Adjunct in INFANT and CHILD FEEDING



Unflavored Gelatine as an Aid to Nutrition and Digestion

The unique qualities of Knox Unflavored Gelatine make it especially useful in the dietary of infants and children.

In certain cases where difficulty is encountered in the digestion of a milk formula the addition of 2 percent of Knox Gelatine improves digestibility. It is also useful in increasing the protein content of the formula.

Older children benefit from the recognized nutritional benefits and added appetite appeal of gel-cookery dishes made with Knox. Unlike ready-flavored gelatin dessert powders with their high sugar and acid content, Knox is all protein with no sugar content.

FREE DIETARY GUIDE BOOK IN INFANT AND CHILD FEEDING

"*Knox Gelatine in Infant and Child Feeding*" contains detailed information compiled from experience, plus an assortment of carefully selected recipes. Copies are available to you upon request. Write Knox Gelatine, Dept. R-37, Johnstown, N. Y.

Available at grocery stores in convenient 4-envelope and 24-envelope packages.

A urinary tract infection

resistant to "...all available antibiotics and chemotherapeutic agents..." TREATED WITH TERRAMYCIN

Case report abstracted from: King, E. Q.; Lewis, C. N.; Welch, H.; Clark, E. A., Jr.; Johnson, J. B.; Lyons, J. B.; Scott, R. B., and Cornely, P. B.: J. A. M. A. 143: 1 (May 6) 1950.

M. F., MALE, AGE 48

P. H.: Pyelonephritis of 1½ years' duration following ureterocutaneous implants (mixed infection); previous therapy with all available antibiotics and chemotherapeutic agents without response.

Lab. Data: Urinary cultures positive for P. vulgaris, E. coli, Staph. albus and enterococci.

crystalline Terra

Therapy: Terramycin 2 Gm. daily for five days; orally in divided doses q. 6 h.

Result: Urine cultures negative except for P. vulgaris by 2nd day of treatment. Response described as "good".

Dosage: On the basis of findings obtained at over 100 leading medical research centers, 2 to 3 Gm. daily by mouth in divided doses q. 6 h. is suggested for acute infections.

Supplied: 250 mg. capsules, bottles of 16 and 100;
100 mg. capsules, bottles of 25;
50 mg. capsules, bottles of 25.

1. King, E. Q.; Lewis, C. N.; Welch, H.; Clark, E. A., Jr.; Johnson, J. B.; Lyons, J. B.; Scott, R. B., and Cornely, P. B.: J. A. M. A. 143:1 (May 6) 1950.

2. Horton, W. C.; Nelson, V. E.; Dickinson, W. E., and Bartholomew, L. A.: Proc. Staff Meet. Mayo Clin. 25:183 (April 26) 1950.

Pfizer

San Francisco Medical Society states:

The profession of chiropody . . . is that branch of medicine which cares for the needs of the human foot in health and disease. This includes the diagnosis, prevention, and treatment of the ailments of the foot. Treatment constitutes medical, mechanical, and minor surgical procedures. As in medicine and dentistry, the educational requirements of chiropody have advanced with the years.

Space does not permit many similar expressions of medical opinion.

To gain license to practice in New Jersey, the chiropodist must attain his degree after a premedical or prechiropodic course followed by a professional course in a recognized school of chiropody, and then he must serve an internship. Such a course of study takes six years, and the degree granted by schools affiliated with leading universities is Doctor of Surgical Chiropody or Doctor Surgeon Chiropodist. In 1951 a seven-year course of study and internship will be necessary before a chiropodist can qualify for practice. It is hardly necessary to point out that, with such training, the chiropodist is well equipped to assume the responsibilities of a foot specialist not restricted to the treatment of only the most minor foot conditions.

Chiropodic clinics have been established and are being conducted in association with surgical, orthopedic, peripheral-vascular, and diabetic services at many leading American medical institutions. The clinics have proved valuable additions to these institutions and have lowered the morbidity records.

In order to build and maintain high standards of professional conduct, the chiropodic profession has enacted a code of ethics patterned after similar codes governing the practice of medicine and dentistry.

One of a series of reports on

Cortone

Key to a New Era in Medical Science

First synthesized from a bile acid in the Merck Research Laboratories in 1946, Cortone* was used initially at the Mayo Clinic with dramatic results in the treatment of rheumatoid arthritis.

Since that time, clinical studies conducted by more than a thousand investigators have indicated a broad spectrum of usefulness for this hormonal substance.

As a result of steadily increasing production, adequate supplies of Cortone now are available for therapeutic use by the physician.

Among the conditions in which Cortone has produced striking clinical improvement are:

RHEUMATOID ARTHRITIS and Related Rheumatic Diseases

ACUTE RHEUMATIC FEVER

BRONCHIAL ASTHMA

EYE DISEASES, Including Nonspecific Iritis, Iridocyclitis, Uveitis, and Sympathetic Ophthalmia

SKIN DISORDERS, Notably Pemphigus, Angioneurotic Edema, Atopic Dermatitis, and Exfoliative Dermatitis, Including Cases Secondary to Drug Reactions

CORTONE Acetate (Cortisone Acetate Merck) is available to all hospitals registered by the American Medical Association. For the present, this drug is to be used, during the initial period of treatment, only in hospitalized patients.

Cortone

TRADE-MARK

ACETATE

(CORTISONE Acetate Merck)

(11-Dehydro-17-hydroxycorticosterone-21-Acetate)

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In addition, the laws of most states governing the practice of chiropody state clearly that license to practice is revokable for unprofessional or unethical conduct.

The conditions which Dr. Brown describes in his paper are entirely within the field and scope of chiropody as legislated in all the forty-eight states. Where and when the nature of a foot lesion or foot problem is such as to require consultation with or treatment by a specialist, the chiropodist can and does refer these cases to the proper physician.

Furthermore, the chiropodist contributes to the early recognition of foot problems which often accompany or are symptomatic of systemic disease and can render invaluable aid in lowering the morbidity accompanying many of these diseases.

Chiropody does not seek a back door to medicine like a cultist group but seeks a status similar to that enjoyed by dentistry. A chiropodist's education and background are very similar to those of a dentist, and the faculties of the various schools of chiropody include many leading names in medicine.

I hope that these facts will help Dr. Brown reconsider his opinion of the profession of chiropody and that he will no longer consider consultation with a chiropodist as "unfortunate."

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Englewood, N. J.

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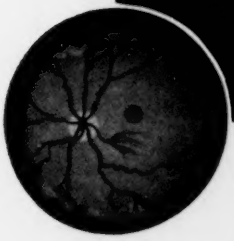
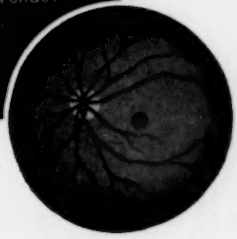


Normal Ocular Fundus



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Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with the physician's name deleted. Address all inquiries to the Editorial Department, MODERN MEDICINE, *84 South Tenth Street, Minneapolis 3, Minnesota.*

QUESTION: Should nose and throat surgery be postponed during the summer to avoid poliomyelitis?

M.D., Pennsylvania

ANSWER: *By Consultant in Neurology.* Yes. All studies indicate that bulbar poliomyelitis is more frequent in patients who have recently had operations in the nose or throat. The consensus is that any nose and throat surgery during the summer months is inadvisable when poliomyelitis is prevalent.

QUESTION: A one-year-old infant has had uterine bleeding lasting for several days at periods twenty-eight to thirty days apart for the past four months. No pathology has been discovered in the genital tract. Do you have any information on precocious menstruation in infants?

M.D., West Virginia

ANSWER: *By Consultant in Gynecology.* Periodic bleeding in an infant should first be investigated by inspection of the vaginal tract with a urethroscope to discover possible foreign bodies or tumor. In the absence of local cause, adrenal or pituitary disease must be considered, as well as feminizing ovarian tumor. Precocious menstruation at the age of one year is very unlikely, although the condition has been reported in a five-year-old child.

QUESTION: Using aureomycin in the commonly accepted therapeutic doses, I treated 2 middle-aged women for primary atypical pneumonia with good results. However, in both cases, within two weeks of completion of therapy, the women had acute attacks of biliary colic. I had heard of the danger of perforation of peptic ulcer following aureomycin therapy, but I wonder whether other physicians have noted effects similar to the colic in these 2 cases?

M.D., Indiana

ANSWER: *By Consultant in Internal Medicine.* I do not know of any instance in which biliary colic has been induced by aureomycin. Neither have I seen perforation of a peptic ulcer following treatment with aureomycin.

QUESTION: Can retained decidual tissue always be diagnosed by examination of the placenta post partum?

M.D., Florida

ANSWER: *By Consultant in Obstetrics.* Decidual tissue is normally retained following expulsion of the placenta since the separation takes place in the decidual layer. Retention of placental tissue can usually be diagnosed by examination of the placenta, although occasionally small pieces may remain in the uterus without apparent defect.

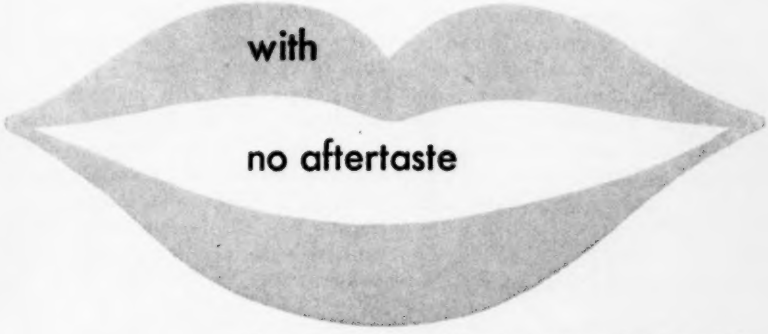
taste

after

taste

with

no aftertaste



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QUESTION: What is the most recent therapy of dermatitis herpetiformis? In *Modern Medicine* (Apr. 15, 1950, p. 130) sulfapyridine was recommended. I would appreciate more detailed information as to dosage of the drug and duration of treatment. Is the iodine-free diet still practiced?

M.D., New York

ANSWER: *By Consultant in Dermatology.* Sulfapyridine remains the most satisfactory treatment for dermatitis herpetiformis, although the drug gives symptomatic relief only and cannot be regarded as curative. Treatment usually must be continued indefinitely. In some cases the disease follows an irregular course and therapy may be omitted entirely for months at a time.

Although dosage is determined by individual results, treatment with sulfapyridine usually begins with 3 or 4 gm. daily. This amount is decreased gradually as the eruption improves. Dosage may vary from 1 to 4 tablets daily with different patients. No ill effects appear to follow prolonged administration, but urine should be examined and white blood cell count determined every three to six weeks to detect unfavorable reaction.

Many patients with dermatitis herpetiformis are sensitive to iodine. In regions of the country where the diet contains more than minimal amounts of iodine, an attempt should be made to eliminate intake of that substance through regulation of the patient's diet.

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Forensic Medicine

COMPILED BY ARTHUR L. H. STREET, LL.B.

PROBLEM: An accident and health policy provided for maximum benefits for total disability and total loss of time caused by disease and involving continuous confinement and regular medical attendance. Under such a provision must confinement be absolute?

COURT'S ANSWER: No.

The Nebraska Supreme Court decided that the provision must be reasonably applied. The confinement may be interrupted on advice of insured's physician in attempting to restore health or in emergencies. But, in this case, no such excuse existed. The insured left his home at will and therefore could not be regarded as being "continuously confined" (41 N.W. 2d 780).

PROBLEM: Could a valid workman's compensation award be made on a theory that a ventral hernia resulted from accidental injury without supporting medical expert testimony?

COURT'S ANSWER: No.

One doctor testified that the hernia was congenital and the only other medical witness testified that he did not know whether the hernia was caused accidentally or not. The Oklahoma Supreme Court pointed out that when an employee's disability requires an expert opinion, the question becomes one of science, resolvable only by expert testimony (215 Pac. 2d 836).

PROBLEM: A hospital physician was sued for negligence in misdiagnosing a woman's ailment as carcinoma and in removing her right breast. [1] Was he excused because he acted under direction of the chief surgeon? [2] Was a doctor experienced in tumor surgery and treatment qualified to testify for plaintiff as to proper diagnosis and the need for operating, although the witness' experience had been recently limited and he did not employ cautery methods used by defendant? [3] Did the patient's consent to the operation preclude her claim that defendant negligently determined that the operation was necessary?

COURT'S ANSWERS: [1] No. [2] Yes. [3] No.

The California Supreme Court upheld judgment in plaintiff's favor by affirming a decision of the District Court of Appeals (211 Pac. 2d 6) which has been previously mentioned in this department (Mar. 1, 1950, p. 28).

1] The fact that defendant operated, with or without assistance, made him a joint wrongdoer with the chief surgeon and rendered him liable for the entire damages resulting. The suit had been pending fifteen years and the chief surgeon, a codefendant, had died.

2] The fact that the medical witness' experience in the field was limited was a matter to be considered in weighing his testimony, but not ground for excluding it.

3] The Supreme Court decided

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that the patient's consent to the operation—given under assumption that the surgeons found operation necessary—did not prevent patient from showing that the diagnosis was negligent (217 Pac. 2d 422).

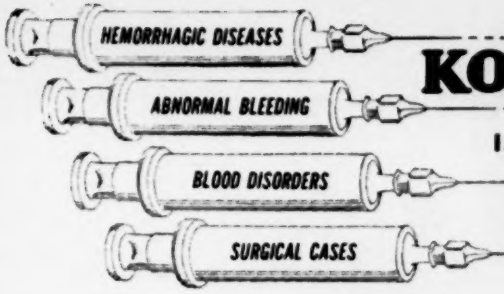
PROBLEM: In a personal injury suit, were roentgenograms sufficiently identified to permit their use by doctors in testifying, when it was shown that the injured person had films made by a specialist, that they were delivered to her doctor, who delivered them to her, that she brought them into court, and that they bore the specialist's identifying mark, although he did not make the films personally, testifying that they were no doubt made by his assistants?

COURT'S ANSWER: Yes (226 S.W. 2d 139).

PROBLEM: Did a juvenile court err in committing a seventeen-year-old youth to an institution for psychiatric treatment on the testimony of 3 psychiatrists that he was potentially dangerous to girls and women because of abnormal sexual impulses, although he was not feeble-minded and 3 other psychiatrists engaged by the minor testified that he was not dangerous, admitting that he needed psychiatric treatment obtainable without commitment?

COURT'S ANSWER: No.

The Pennsylvania Supreme Court said that the juvenile court has discretionary power in such cases, particularly in view of the order of commitment being subject to modification or revocation on proof of changed conditions (71 Atl. 2d 823).



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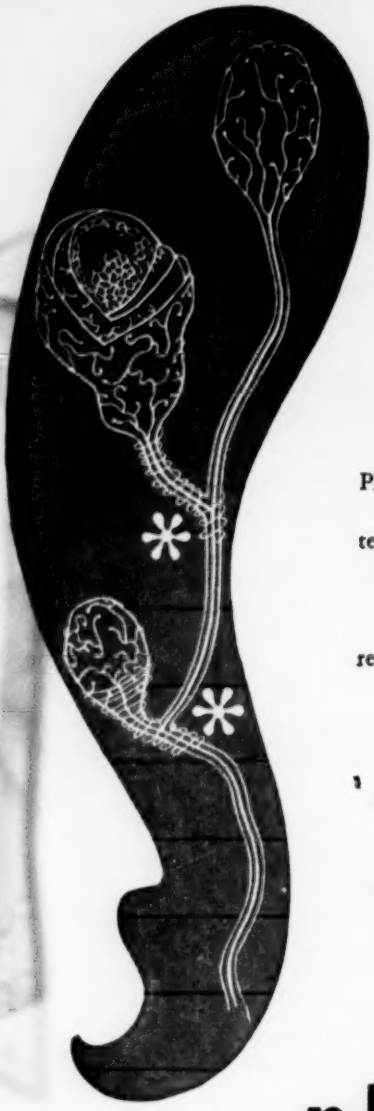

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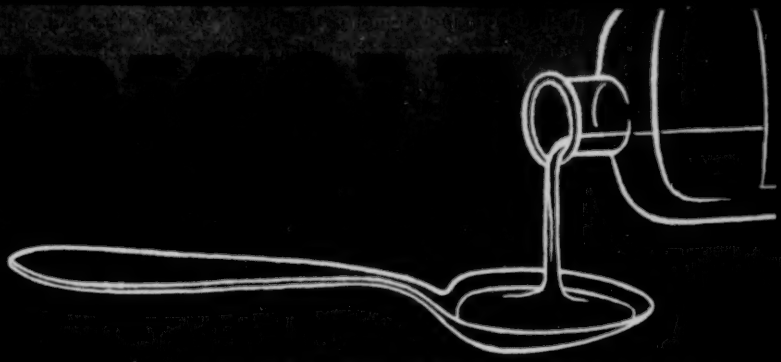

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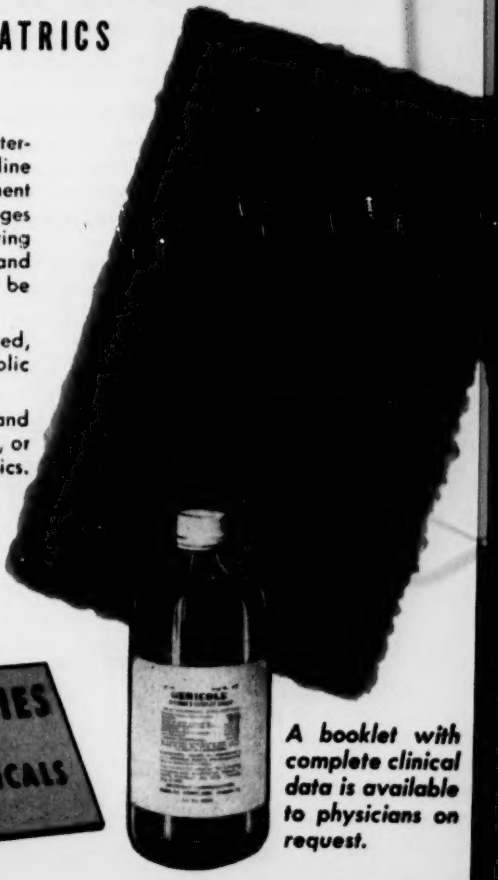
(1) Varco, R. L.: Surgery, 19:304 (March) 1946 ". . . the fatty liver . . . is unquestionably of great prognostic significance." (2) Philpott, N. W., et al.: Am. J. Obst. & Gynec., 57:125 (Jan.) 1949. (3) Editorial: Ann. Int. Med., 22:615 (April) 1945. (4) Best, C. H., Mac Lean, D. L., and Ridout, J. H.: J. Physiol., 83:275 (Feb. 9) 1935. (5) Cohnheim, J.: The New Sydenham Society London (1889).



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Washington Letter

Initial Medical Demands of Korea Fighting Met

Outbreak of fighting in Korea found military medical departments still busy consolidating and economizing—but with sufficient surplus of beds and personnel to stand up to the first impact. The surplus wasn't great, but it was enough to fill the immediate need.

The rush that followed in the next few weeks to get more doctors into service, to resurvey facilities, and to speed up planning could hardly have been avoided by any kind of advance blueprinting.

The fact that Army, Navy, and Air Force doctors were prepared for a fighting war can be attributed in part to a hard-boiled policy which accompanied the past year's economy operations.

As early as last fall the policy first began to be felt and wasn't welcomed everywhere. The policy was this: The primary obligation of military medical services is to provide the best of medical care to military personnel; every other consideration must be secondary.

In line with this policy, medical services which dealt directly with soldiers and sailors were strengthened. At the same time military medical departments were deemphasizing internships, fellowships, and research, and attempting to disengage themselves from responsibility for nonmilitary patients, such as VA cases.

Money was saved, but it appears now that the actual fighting man lost little or nothing in terms of ready medical care.

A few months ago several congressmen were at the throats of Defense Secretary Louis Johnson and Dr. Richard Meiling, head of the Office of

(Continued on page 100)

"Exactly what do you think a radiologist does?"

NOW AVAILABLE FOR TRIAL

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"It is possible that the method of Lewin and Wassen holds out the most immediate promise of relief to sufferers from this disease."

— LeVay, D., and Loxton, G. E.[3]

... the adrenal corticoid hormone-vitamin C therapy first introduced by Lewin and Wassen.[2] Subsequent investigations[1, 3, 4, 5, 6] have confirmed the striking effectiveness of this combination (in a high proportion of cases) in banishing pain, promoting ease and increased range of movement, and inducing a genuine sense of well-being.

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1. Lancet 1: 209 (Feb. 4) 1950. 2. Lewin, E., and Wassen, E.: Lancet 2: 993 (1949). 3. LeVay, D., and Loxton, G. E.: ibid. 2: 1134 (1949). 4. Robertson, J. A.: ibid. 1: 134 (1950). 5. Fox, W. W.: ibid. 1: 135 (1950). 6. Bull. No. 13, Staff Conferences, DeCourcy Clinic, Cincinnati, O.

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Tests for Malignancy

MAURICE M. BLACK, M.D., AND FRANCIS D. SPEER, M.D.*
New York Medical College, New York City

EXISTENCE of cancer in the body may be strongly suspected from the results of simple biochemical procedures.

The tests employed reflect the systemic alterations associated with malignant growths. These systemic changes are not specific for cancer and develop independently of the cachexia caused by the tumor. Some nonmalignant diseases such as diabetes or cirrhosis also give positive results.

Several tests for cancer are based upon changes in the plasma proteins. Protein synthesis by the liver is abnormal when cancer is growing in the body, even without hepatic metastases. Albumin formation is diminished in quantity and altered qualitatively. Production of fibrinogen and globulin is often increased.

Serum from a patient with cancer is more resistant to coagulation by heat than is normal serum. Similarly, less iodoacetate is required to prevent thermal coagulation of sera from patients with malignant disease than sera from healthy people. This phenomenon, shown by the thermal sensitivity, apparently results from abnormal serum albumin with cancer. Massive inflammatory disease such as tuberculosis also reduces the iodoacetate index.

Plasma exposed to a standard amount of heat becomes turbid if cancer is present. This reaction is related in some degree to the increased fibrinogen content of plasma from patients with cancer.

Another reflection of the abnormal reactivity of the serum albumin with cancer is decreased methylene blue reduction capacity. The serum of 75% of patients with malignant disease displays a subnormal capacity for reducing methylene blue.

The Bolen blood cell clumping is positive in a large majority of cases of cancer. Although simple, the test must be performed and interpreted with care. A fingertip is punctured to obtain blood which is placed on a glass slide and allowed to dry on a level surface. When dry, blood from a healthy person appears homogeneous, with central clumping of cells. If cancer is present, a lace-curtain-like pattern becomes visible after drying.

Yet another test for cancer depends upon the increased transmission and diminished fluorescence of malignant serum exposed to near-ultraviolet light. Probably this test also reflects the abnormal serum proteins of cancer patients.

Other alterations of liver metabolism occur with cancer, especially of

* Chemical tests for malignancy. Am. J. Clin. Path. 20:446-455, 1950.

the gastrointestinal tract. Dehydrogenase activity is abnormal. Hepatic glycogen content is unaffected by glucose administration. Various enzyme activities are diminished. These changes occur independently of hepatic metastases. Thus far, tests for cancer based on these alterations in liver metabolism have not been widely used.

Steroid metabolism is also deranged in patients with cancer. The pattern of hormone excretion in the urine is abnormal. Patients with carcinoma of the prostate, breast, or larynx excrete an abnormal steroid metabolite, delta^{8,11} etiocholanolone.

Patients with cancer excrete increased amounts of cholesterol in the urine, about 6.09 mg. each twenty-four hours, in contrast to about 1.69 mg. cholesterol for healthy persons. Other tests based upon gonadotropin excretion and urine fluorescence have been devised.

For greatest diagnostic accuracy, Maurice M. Black, M.D., and Francis D. Speer, M.D., recommend use of the methylene blue reduction test and the heat coagulation procedure. If either test is abnormal, malignant disease is suggested. These tests will lead to the identification of 89% of diverse forms of cancer and more than 95% of cases of gastrointestinal cancer.

VIRAL AND OBSTRUCTIVE JAUNDICE may be distinguished by the determination of plasma vitamin A. In most cases of infectious hepatitis, levels drop rapidly at onset and rise to normal on recovery, often before icterus disappears. With blockade of the common duct by stone, stricture, or carcinoma, values ordinarily remain normal for weeks or months, until the liver is seriously damaged, report Donald P. White, M.D., and associates of Duke University, Durham, N.C.

Gastroenterology 14:541-548, 1950.

TUBERCULOUS PERITONITIS usually subsides with streptomycin treatment. Favorable results were obtained with the antibiotic for 25 of 26 patients, report Ruth H. Wichelhausen, M.D., and Thomas McP. Brown, M.D., of Veterans Administration Hospital, Washington, D.C. Equally good results are achieved with either 1 or 2 gm. daily. Improvement is general and fever and abdominal symptoms rapidly decrease. Laparotomies performed in 3 cases revealed gross objective improvement. However, extraperitoneal lesions sometimes develop after and even during treatment. Outcome is not apparently affected by the duration or type of peritoneal involvement. In the improved cases, 4 relapses occurred, but in 2 of these improvement was renewed by a second course of streptomycin.

Am. J. Med. 8:421-444, 1950.

Electrocardiograms with Hypopotassemia

SAMUEL BELLET, M.D., WILLIAM A. STEIGER, M.D.,
CARL S. NADLER, JR., M.D., AND PETER C. GAZES, M.D.*
University of Pennsylvania, Philadelphia

DEPLETION of serum potassium is frequently serious. Recognition of the condition and evaluation of effects of therapy are facilitated by employment of the electrocardiogram.

Potassium is essential for normal functioning of muscles and nerves, particularly in the neuromuscular transmission of impulses. In familial periodic paralysis, hypopotassemia results in weakness, poor muscle tone, and paralysis; ultimately death will ensue.

The following cardiac effects of hypopotassemia have been noted: dilatation of the heart, development of systolic murmurs, ectopic rhythms, and profound electrocardiographic changes of a type associated with severe grades of myocardial abnormalities.

Electrocardiographic changes of patients with hypopotassemia follow five different patterns:

1] Varying depression of the ST segment

2] Inversion of T waves

3] T waves of normal amplitude with prolongation of QT interval

4] Low amplitude of T wave

5] Prominent U wave following T wave

In 79 patients with hypopotassemia from several causes, Samuel Bellet, M.D., William A. Steiger, M.D., Carl S. Nadler, Jr., M.D., and Peter C. Gazes, M.D., found that patterns 1 and 2 occurred in 80% of patients. Significant U waves were observed in 53%. In order of diagnostic importance the electrocardiographic alterations were QT interval prolongation, T wave inversion and ST segment depression, and prominence of a U wave.

With hypopotassemia, the QT or QU interval may be used interchangeably for diagnostic purposes and probably as a measure of electrical systole.

In general, the degree of ST segment depression and lengthening of the QT interval vary with the severity of hypopotassemia. In diabetic acidosis, the most common tracing is that of pattern 2. With excessive vomiting, however, pattern 1 predominates. U waves are significant and tend to assume highest amplitude when fluid loss has resulted from vomiting or diarrhea. With diabetes, U waves are also observed but do not attain the prominence noted with vomiting.

Electrocardiograms of almost all patients return to normal as the serum potassium reaches usual values; however, the tracing rather rapidly tends to revert to the hypopotassemic con-

* Electrocardiographic patterns in hypopotassemia: observations on 79 patients. Am. J. M. Sc. 219:542-558, 1950.

figuration after cessation of potassium administration. Because the electrocardiogram is influenced chiefly by the serum level of potassium, effects on the tracing are frequently slight or absent when the element is replaced slowly by means of hypodermoclysis.

The electrocardiogram of hypopotassemia can be simulated by hypocalcemia; anoxia as in coronary occlusion, pulmonary embolism, and shock-like states; hypertension; some types of myocardial damage; the effects of drugs, particularly quinidine; and other unknown factors. The differential diagnosis can be made in most instances from the history, physical examination, and amount of serum potassium.

The electrocardiogram of hypocalcemia is differentiated from that of hypopotassemia by the isoelectric period between the end of the S wave and the beginning of the T wave and the unaltered T wave proper in hypocalcemia, while in low potassium states the T wave is inverted or the ST segment depressed and the entire QT interval is prolonged.

The Liver in Pneumococcal Pneumonia

H. J. ZIMMERMAN, M.D., AND LAWRENCE J. THOMAS, M.D.*

IN most cases of lobar pneumonia, liver function is extensively impaired.

Jaundice with the acute stage of infection is therefore hepatocellular, not obstructive or hemolytic, as often supposed.

Severity of the liver disturbance cannot be correlated with degree of pneumonia, measured by the usual criteria. Icterus is not an unfavorable prognostic sign, conclude H. J. Zimmerman, M.D., and Lawrence J. Thomas, M.D., of George Washington University, Washington, D.C.

Bromsulfalein retention, thymol turbidity, and cephalin-cholesterol flocculation were determined in 81 cases of pneumococcal pneumonia without jaundice and in 13 icteric cases. As a rule, values tended to rise with acute infection and subside during convalescence.

The hepatocellular nature of jaundice was shown by large amounts of direct-reacting bilirubin in the blood together with bile and increased urobilinogen in the urine.

The extent of hepatic dysfunction probably depends on a combination of factors, including previous state of the liver, especially with regard to alcoholism and dietary deficiency, as well as intensity of infection, fever, anoxia, and the accompanying alarm reaction.

* The liver in pneumococcal pneumonia: observations in 94 cases on liver function and jaundice in pneumonia. J. Lab. & Clin. Med. 35:556-566, 1950.

PREVENTION OF ANGINA PECTORIS by whisky may be dangerous. Alcohol is probably incapable of dilating the coronary arteries of patients with coronary sclerosis and may mask the warning signal of angina without affecting the underlying myocardial anoxia. Henry I. Russek, M.D., Charles F. Naegele, M.D., and Frederick D. Regan, M.D., of the U.S. Marine Hospital, Staten Island, N.Y., believe that whisky prevents angina by increasing the pain threshold and creating a sense of well being. From 1 to 2 oz. of whisky taken five to thirty minutes before exercise abolishes pain but fails to prevent transient electrocardiographic changes in the RS-T segments and T waves during exercise. Nitroglycerine 1/150 gr. before exercise forestalls both the pain and electrocardiographic changes of angina pectoris.

J.A.M.A. 143:353-357, 1950.

OVERFREQUENT BLOOD DONATION can be prevented to some extent if the donor's finger is marked with a dye which is invisible except under fluorescent light. Anson Hoyt, M.D., and associates of Los Angeles find that the application of dye CS-20 to the nail base is more satisfactory than usual methods of identification which can be nullified by false information from persons wishing to give blood too frequently. Invisible under ordinary light, the stain gives a strong blue fluorescence when exposed to long-wave, nonerythema-producing ultraviolet rays. No skin irritation appears to result from use of this material. The principal disadvantage of CS-20 is that detection is not always possible after three weeks.

J. Lab. & Clin. Med. 35:634-636 1950

DISSECTING ANEURYSM should be suspected when a patient with hypertension has severe pain in the epigastrium. The condition may be incorrectly diagnosed as an acute abdominal condition because abdominal pain is frequently the initial symptom state David C. Levinson, M.D., Donald T. Edmeades, M.D., and George C. Griffith, M.D., of University of Southern California, Los Angeles. Usually onset is sudden, with agonizing pain in the chest or abdomen which radiates most often into the back. The patient is frequently in a state of shock. An aortic diastolic murmur is an almost certain indication of dissecting aneurysm. Inequalities of pulse and blood pressures and renal and neurologic symptoms may also be present. The most common electrocardiographic pattern is that of left ventricular strain.

Am. J. Med. 8:474-479, 1950.

One-Stage Costoversion Thoracoplasty

RICHARD H. OVERHOLT, M.D., AND LEO J. KENNEY, M.D.*
Tufts College, Boston

When large amounts of pulmonary tissue are destroyed by tuberculosis, removal of ribs allows the lung to contract and arrests disease.

Conventional operations are generally done in several stages, to maintain rigidity of the chest wall and prevent paradoxic motion. By a one-stage technic recently introduced by Richard H. Overholt, M.D., and Leo J. Kenney, M.D., rib segments are inverted and fastened in place to support tissues over the collapsed lung (Fig. *a*).

The new method apparently fulfills all requirements, and operative risks are slight. Thoracic volume is reduced to accommodate the remaining healthy tissue, but all possible pulmonary function is preserved, as well as the arm and shoulder movement.

Deformity of the chest and shoulder girdle is slight. Since the reconstructed chest wall is permanently stabilized, no pain, discomfort, or paradoxic movement results from the procedure.

The thoracic cage is exposed by the usual parascapular incision (Fig. *b*). Periosteum is removed from all ribs to be sectioned, as far forward as necessary in each case and back to the very end (Fig. *c*). The first rib is stripped along the lower surface but otherwise left intact. The rib immediately below the last to be removed is also denuded.

Intercostal muscles are detached from the transverse processes and vertebrae. All soft parts are wiped down from the extreme posterior tip of each rib to the periosteal reflection. In ribs to be reinserted for support, holes $\frac{1}{16}$ in. across are drilled for sutures.

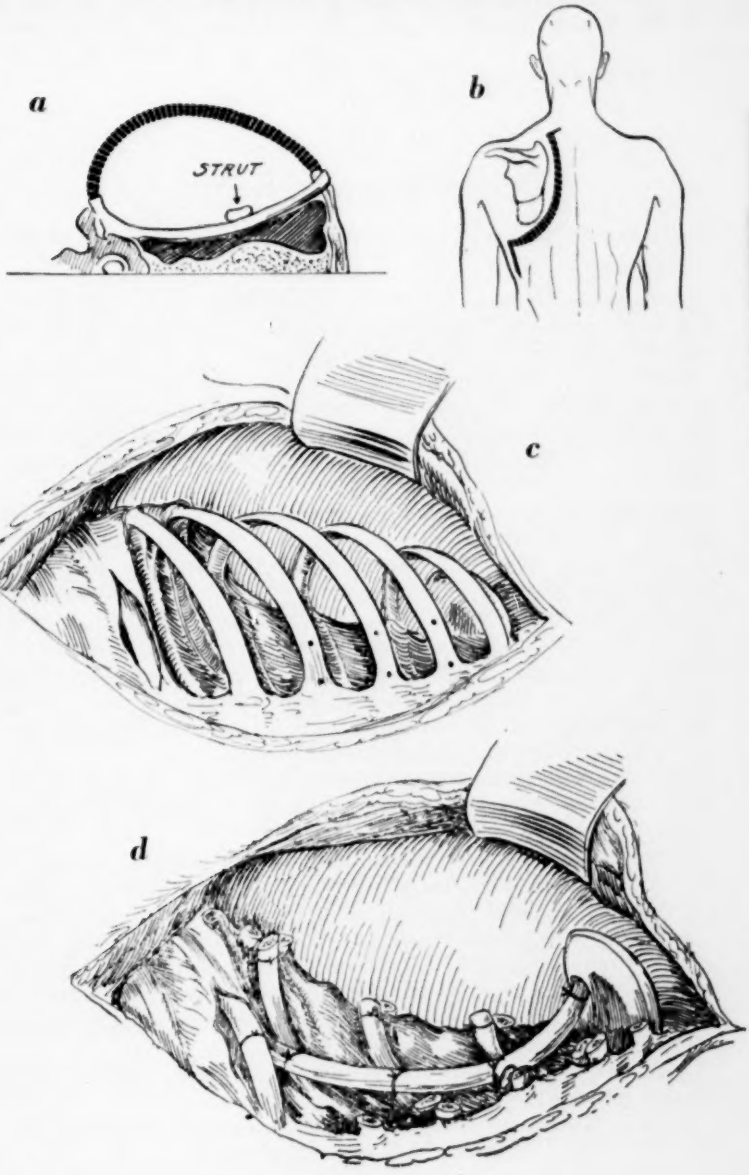
All costal segments usually collapsed in several stages are then excised, omitting the first rib and the lowest stripped rib. Transverse processes are not disturbed. Several rib portions are replaced with concavity outward, and the anatomic angle of the rib is fitted deep into the paravertebral gutter, to ensure adequate pulmonary collapse.

The inverted sections are firmly fastened in place with heavy silk ligatures threaded through the drill holes. The largest segment or a piece from the bone bank is placed lengthwise as a strut over the concave bridge of bone (Fig. *d*). One end is anchored to the first rib just above the costochondral junction, and the other end is attached to the inner surface of the stripped rib. Each underlying inverted section is bound to the strut by ligature.

As a final step, a portion of the scapula is removed at the lower end, to prevent the tip from impinging on the shelf formed by the uppermost

* One-stage costoversion thoracoplasty. Bull. New England M. Center 12:62-70, 1950.

INVERSION OF RIB SEGMENTS



intact rib. Danger of a subscapular space is thus eliminated, and elevation of the shoulder girdle is prevented.

Within the past few months, costoversion thoracoplasty involving six or seven ribs on the left was done for 2 women and 1 man. Convalescence was uneventful in all of the cases.

Biliary Stricture Repair

WALTMAN WALTERS, M.D., AND JOHN M. CAMERON, M.D.*

ANASTOMOSIS of the common bile duct to the duodenum is the most satisfactory type of repair for biliary stricture. Good results are obtained in about 80% of cases.

However, if the common duct is extensively involved by stricture, the hepatic duct may be dissected free and anastomosed to the duodenum. A duct-to-duct anastomosis may be attempted if the distal end of the common bile duct can be located and enough normal tissue is available.

A tubular splint is placed in the biliary duct at the time of surgery. One of several types may be used, but none can be left in place more than temporarily. All types eventually clog with bile if left in the duct long enough.

Removable splints include the T tube and a catheter which is passed into the duodenum. The catheter is anchored in the biliary tree by a long silk suture led out to a button on the abdominal wall. When the suture is removed, peristalsis draws the catheter out of the bile duct. The optimum time for removal of the tubular splint is at least three months after surgery.

The T tube maintains position easily and allows adequate drainage, irrigation of the biliary tract, and the making of cholangiograms.

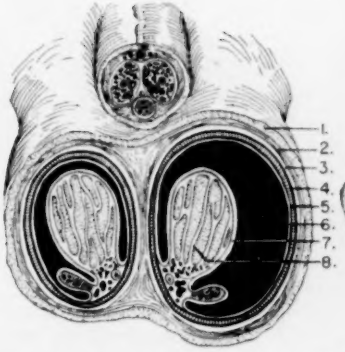
Recurrent cholangitis sometimes appears after surgical anastomosis of the biliary tract to the duodenum. Waltman Walters, M.D., and John M. Cameron, M.D., of the Mayo Clinic, Rochester, Minn., believe that this cholangitis is caused by biliary obstruction from stricture re-formation. Reflux of duodenal contents into the bile ducts does not necessarily cause cholangitis. Patients with recurrent biliary obstruction almost always have a new stricture at the line of anastomosis.

The hospital mortality rate of stricture repair surgery is at present about 3%.

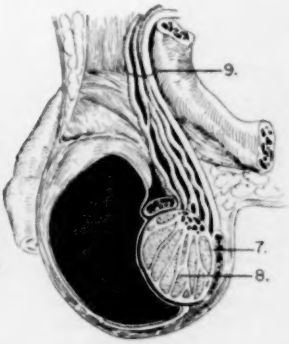
* Studies of biliary strictures and their surgical treatment in 184 patients. Proc. Staff Meet., Mayo Clin. 25:150-156, 1950.

Hydrocelectomy

F. M. Al Akl, M.D.
Kings County Hospital, New York



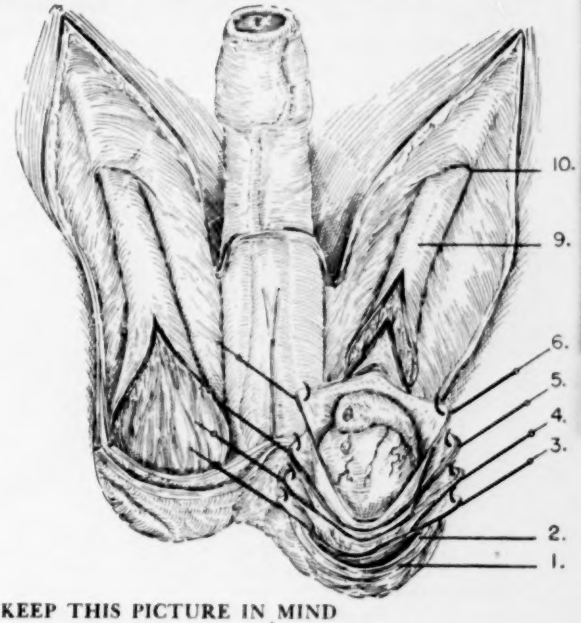
HYDROCELE—Transverse section



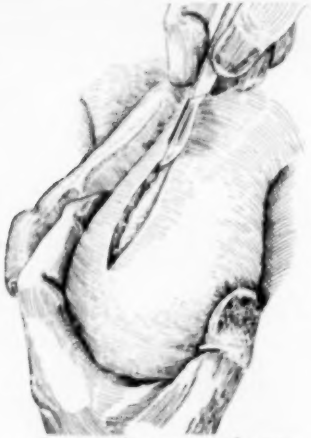
HYDROCELE—Longitudinal section

COVERINGS OF THE TESTICLE

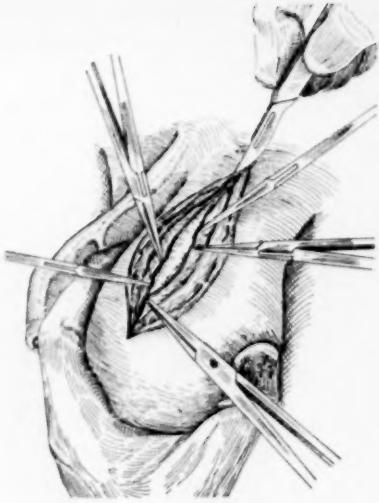
1. Skin
2. Dartos
3. External spermatic fascia
4. Cremaster muscle and fascia
5. Internal spermatic fascia
6. Tunica vaginalis
7. Tunica albuginea
8. Testis
9. Spermatic cord
10. External inguinal ring



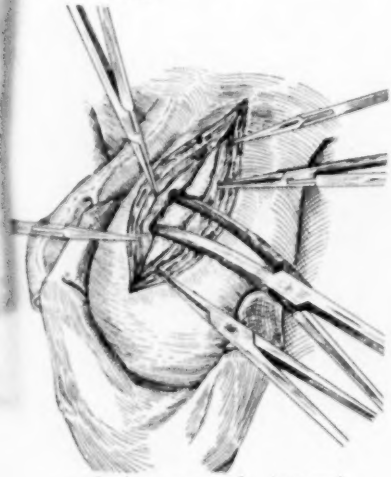
KEEP THIS PICTURE IN MIND



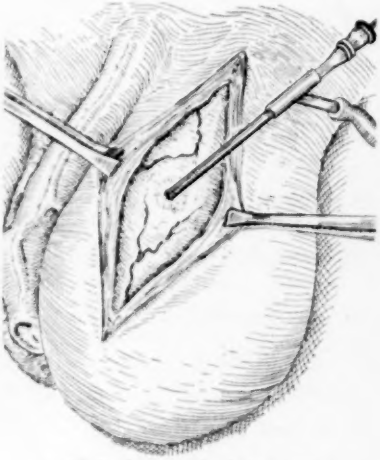
1. Immobilize prepared scrotum and stretch the covering skin by grasping scrotal mass firmly. Incise skin and closely adherent dartos over the superior anterolateral aspect of the swelling to a distance of 6 cm.



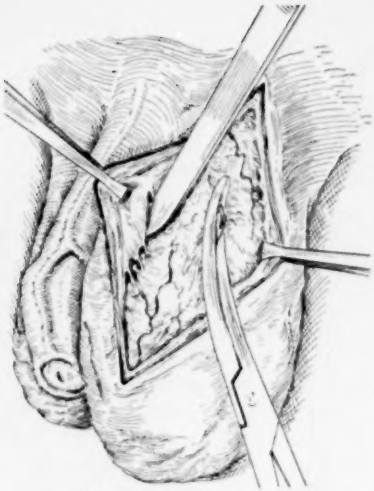
2. Continue incision into external spermatic fascia and underlying cremaster layer of muscular fibers and fascia. Clamp bleeders.



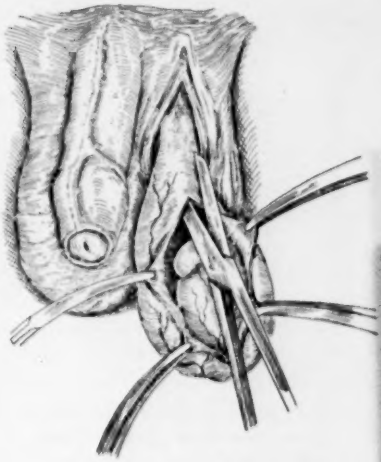
3. Incise exposed internal spermatic fascia, then reflect from glistening tunica vaginalis. Deliver vaginal sac containing fluid and testicle into wound. Tie bleeders.



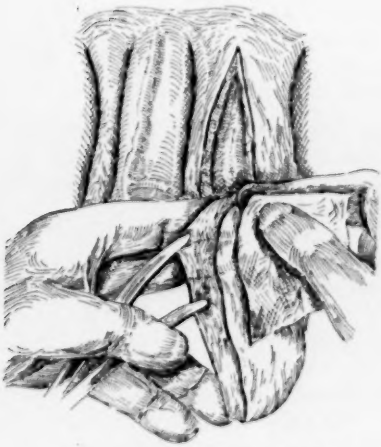
4. If hydrocele is large, apply Allis clamps to incision, then puncture tunica vaginalis with trocar and aspirate excess fluid.



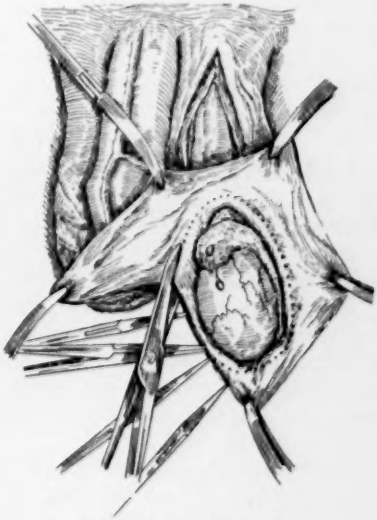
5. Withdraw trocar. Clamp opening in tunica vaginalis, then separate tunica from enveloping internal spermatic fascia and deliver reduced mass into wound.



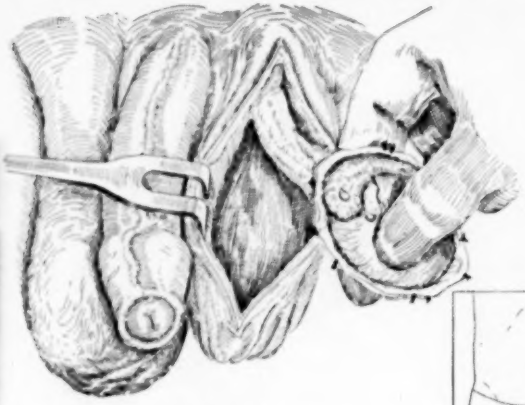
6. Release clamp, scissor vaginal sac open, and clamp all edges.



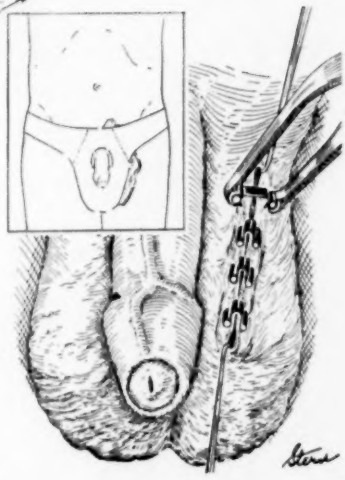
7. Clean cavity and finish separating tunica vaginalis from the spermatic cord and border of epididymis.



8. Trim the tunica vaginalis and carefully clamp every bleeder.



9. Tie all bleeders, then reposit the bare testicle into the scrotal sac.



10. With skin hooks, spread incision, then close scrotal edges with clips.

NOTES

Some authorities prefer to evert the sac and to suture it behind the testicle; others simply introduce a running hemostatic suture into the trimmed edge of the tunica vaginalis.

In children particularly, the distal end of the processus vaginalis may remain patent, and the hydrocele sac extends up on the cord. In such cases, the sac is followed and trimmed from the cord.

Fluid may accumulate in one or more segments of unobliterated processus vaginalis and result in mono- or multilocular hydrocele of the cord. Or the processus vaginalis may fail to fuse, giving rise to intermittent hydrocele. In such cases the approach should be that for congenital inguinal hernia.

Because of lack of external support and the dependent position of scrotal structures, perfect hemostasis is particularly important in scrotal surgery. It may be wise to drain the wound, particularly when local anesthesia is employed.

Dressings are difficult to maintain over the scrotum. Petrolatum jelly gauze held in place by an elastic suspensory is probably the most satisfactory type of postoperative dressing.

Nephralgia and Lower Quadrant Pain

EDWARD L. YOUNG, M.D., WALTER E. WILSON, JR., M.D., AND ROSEMARY NELSON, M.D.*

Faulkner Hospital and New England Hospital for Women and Children, Boston

PAIN in the back or lower abdomen may arise from autonomic imbalance involving the renal tract. The most severe cases may require sympathectomy and psychiatric care.

The pain is probably due to overstimulation of the autonomic system of emotionally unstable individuals by fear, grief, fatigue, or a sense of personal inadequacy. In addition, the kidney may be particularly susceptible because of previous injury or unnoticed minor disease.

Spasm then occurs in the smooth muscles of the calyces and pelvis or in the ureter, emptying of the involved segments is delayed, and overdistention produces colic. Emotional balance is further upset by pain, tension increases, and a vicious cycle is established.

A practical plan of diagnosis and treatment for this small group of so-called idiopathic nephralgia patients is proposed by Edward L. Young, M.D., Walter E. Wilson, Jr., M.D., and Rosemary Nelson, M.D.

The urinary tract should be examined thoroughly and symptoms reproduced, if possible. Previous injuries or infections, operations, and postoperative or postpartum complications are investigated. Laboratory procedures should include a complete blood count, urinalysis with cultures, Wassermann test, and nonprotein nitrogen determination.

Intravenous pyelography is done for objective proof that the urinary tract has no lesions, except possibly, slightly enlarged pelves or ureters. The complaint may be localized by distention from the fluid introduced for retrograde pyelography.

If the cause is entirely autonomic, pain will subside when Etamon is given during a spontaneous or induced attack. A placebo should be administered during a subsequent attack for comparison of effect.

As a further test, sympathetic ganglia may be blocked from the ninth dorsal to the second lumbar level.

According to intensity, pain may be relieved or the cycle permanently interrupted in several ways. If emotional instability is slight and nephralgia of short duration, the ureter is stretched with bougies to numb the nerve endings.

To abolish more persistent reactions, novocain sympathetic blockade is repeated fairly often.

Denervation is employed only for incapacitating pain. As a substitute for conventional technics, the three splanchnic nerves are divided in the lower mediastinum, and the sympathetic chain is removed from the seventh dorsal through the first lumbar ganglia.

* Nephralgia and associated lower quadrant pain. J. Urol. 63:778-785, 1950.

Bronchography for Children

JOSEPH B. MILLER, M.D., WILLIAM H. CONYERS, JR., M.D., AND NORMAN DINHOFFER, M.D.*

Sea View Hospital, Staten Island, N.Y.

A simple, safe, and comfortable method of bronchography for children or adults is based on aerosol surface anesthesia. The subject sits quietly in a chair and directs the mist into his throat.

Cough, gag, and swallow reflexes are eliminated, and Lipiodol is readily introduced without endoscopic instruments or special skill. A single physician can handle several office patients in one morning, instead of the usual 1 or 2.

To hasten anesthesia, Joseph B. Miller, M.D., William H. Conyers, Jr., M.D., and Norman Dinhoffer, M.D., add a detergent, glycerin, and epinephrine to 0.5% solution of pontocaine.

Other material consists of a DeVilbiss No. 40 nebulizer with rubber stopper in the side vent and a mouthpiece 3 in. long, an oxygen tank with gauge and tubing, adhesive tape 1 in. wide, gauze squares, a 20-cc. vial of 40% Lipiodol solution, a 20-cc. syringe with 3 in. of fine catheter tubing, and a tilt stretcher or x-ray table.

On the day of radiography, postural drainage is done on arising, and nothing is given by mouth. Nembutal is administered two hours before the procedure, and morphine or codeine sulfate and atropine sulfate half an hour in advance.

About 8 cc. of pontocaine solution is put in the nebulizer, and the child's nostrils are closed by adhesive tape. He is told to pull his tongue forward with a gauze square. The anesthetic mixture is inhaled for twenty minutes.

The mouthpiece is directed to the sides as well as the midline of the throat and gradually pushed deeper. Oxygen flows at the rate of 6 liters per minute for the first five minutes, then at 10 to 12 liters per minute.

For instillation of Lipiodol, the tape is removed from the nose and clothes are taken off to the waist. The patient is put under the roentgen tube with feet at the adjustable end of the table. He lies on the side to be examined, supported on the elbow at an angle of 30° from horizontal. The cassette is placed and labeled.

With tongue held forward, the catheter tip of the Lipiodol syringe is inserted 2 or 3 in. into the nostril, and the solution is injected into the nasopharynx, avoiding the esophagus. The procedure takes about forty-five seconds.

Within a few more seconds the solution passes through the larynx into the lower pulmonary lobe. The stream is spread through the bronchial tree by rapid change of posture. To prevent deposition in alveoli.

* A simple, safe bronchographic technique for children. J. Pediat. 36:721-727, 1950.

only four minutes should be allowed between the commencement of Lipiodol infusion and roentgenography.

The catheter is removed about sixty seconds after start of injection. To fill the lower lobe and the middle lobe or lingula, prone and supine positions are assumed for twenty seconds each. The upper lobe is then filled by 45° elevation of the feet in lateral, anterior, and posterior positions.

Lateral and posteroanterior films are exposed. Postural drainage is begun at once, using forced tussive squeezing for thirty minutes but no coughing. The Lipiodol is usually cleared from the trachea and from the lower and middle lobes.

To drain the upper lobe downward, the child arises before returning home or to the ward where postural drainage is continued for half an hour.

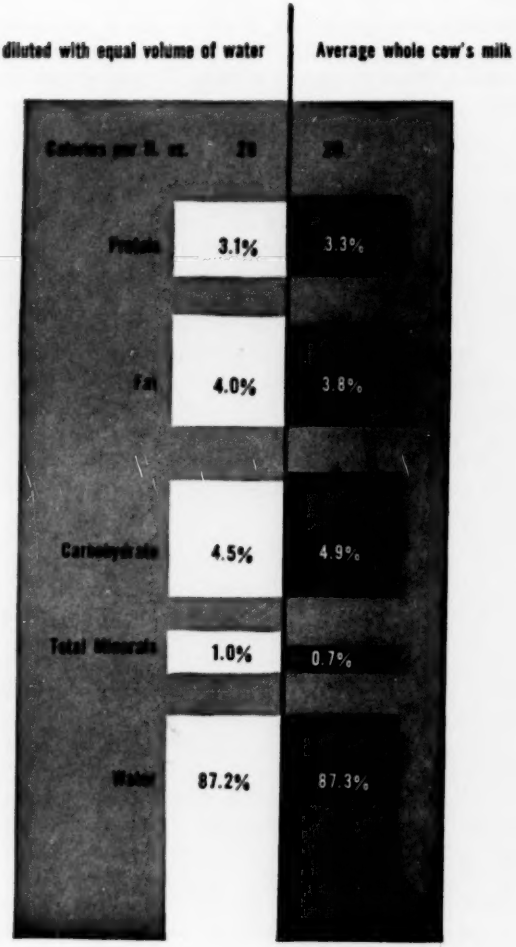
RESULTS WITH GANTRISIN in treatment of children are comparable to those with other sulfonamides. No toxic reactions occur and administration of alkali appears unnecessary. The high solubility of the drug usually prevents crystalluria. John A. Bigler, M.D., of the Children's Memorial Hospital, Chicago, and Orville Thomas, M.D., of Shreveport, La., observed the action of the drug, 3,4-dimethyl-5-sulfanilamido-isoxazole, in therapy of 71 children with lobar pneumonia, bronchopneumonia, atypical pneumonia, bronchitis, otitis media, tonsillitis, adenitis, and urinary tract infections. Only 7 patients, 3 with atypical pneumonia, failed to benefit; effects were excellent in all other cases. Dosage was 0.13 to 0.26 gm. per kilogram of body weight in four to six divided doses daily.

Am. J. Dis. Child. 79:785-790, 1950.

SPINAL FLUID EXAMINATIONS of poliomyelitis patients generally show uniform changes in cell count and protein values. In 142 serial examinations of 31 patients, G. David Ford, M.D., Frederic L. Elridge, M.D., and Clifford G. Grulee, Jr., M.D., of the University of Texas, Galveston, found that protein values, which are usually no more than slightly elevated in early stages of the disease, reach a peak by about the fourteenth day. Patients with paralysis have consistently higher protein values than nonparalytic patients. Cell counts diminish rapidly as the disease progresses, the greatest fall coming after about the fourth day for paralytic patients and after about the eighth day for patients without paralysis. The approximately equal distribution of mononuclear and polymorphonuclear cells gradually shifts to mononuclear predominance by the end of the first week in all patients.

Am. J. Dis. Child. 79:633-639, 1950.

not just milk replacement



but casein replacement . . .

Casein—and also lactalbumin—are frequently the cause of hypersensitiveness to cow's milk. This hypersensitiveness can be manifested by gastrointestinal upsets followed in time by eczema of a mild or acute nature. In such cases cow's milk of all types must be eliminated from the diet. Mull-Soy is a near equivalent for milk to be used in these cases.

A scientifically sound formula for avoidance of casein allergy

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Poliomyelitis and Pregnancy

Generally speaking, pregnancy need not be avoided or interrupted because of poliomyelitis, whether the infection is long past, recent, or concurrent. The following 2 reports indicate that the course of labor with or without paralysis is about the same as for healthy women.

Effects on Mother

Ake Nettelblad, M.D.*

To observe the effects of poliomyelitis on pregnancy, an analysis was made by Ake Nettelblad, M.D., of obstetric cases at the Dalsland Hospital, Bäckefors, Sweden.

Included in the study were 43 women who either had had poliomyelitis before gestation or who acquired the disease during pregnancy and 628 unaffected women. The poliomyelitis patients, some of whom had had the disease many years before parturition, were delivered of 62 infants; the nonpoliomyelitis patients had 996 offspring.

Lesions of the spinal cord do not involve smooth muscles of the uterus, and labor proceeds normally when extremities are paralyzed. If poliomyelitis weakens abdominal muscles needed for expulsion, the experienced obstetrician can depend on forceps or cesarean surgery.

Average duration of labor is not prolonged by poliomyelitis. As a rule, delivery is spontaneous, with vertex presentation.

Judging by weight and length of babies, premature birth is slightly more common in persons who have a history of poliomyelitis, and an underdeveloped baby may not survive. In a rare instance, muscular atrophy or meningitis in a newborn child suggests fetal susceptibility to the virus.

Effects on Child

Max J. Fox, M.D., and Frank H. Belfus, M.D.†

Unlike rubella, poliomyelitis in the first trimester apparently does not produce congenital defects. Children are not blind, deaf, or otherwise deformed in spite of onset of the disease less than two months, or between two and three months, after conception.

Pregnancy seems to increase susceptibility to poliomyelitis, since 57% of the married women admitted for poliomyelitis from 1943 through 1948 at the South View Isolation Hospital, Milwaukee, were expectant mothers. Chronic fatigue or endocrine changes may be responsible, suggest Max J. Fox, M.D., and Frank H. Belfus, M.D., of Marquette University.

Most infants are born at full term with normal weight, even if mothers are severely paralyzed. Of 33 women with acute poliomyelitis during preg-

* Obstetrical aspects of acute anterior poliomyelitis existing prior to or during pregnancy. Acta obst. et gynec. Scandinav. 29:329-350, 1950.

† Poliomyelitis in pregnancy. Am. J. Obst. & Gynec. 59:1134-1139, 1950.

nancy, only 2, who had been severely affected by the disease and had flaccid abdominal muscles, required cesarean section; both were delivered successfully.

Abortion appeared somewhat more often than in a normal group and tended to occur during or soon after acute illness. The rate, however, was only 21%. Maternal mortality of poliomyelitis occurring during pregnancy is 12%.

Sympathectomy for Abdominal Pain

JOHN R. BINGHAM, M.D., FRANZ J. INGELFINGER, M.D., AND REGINALD H. SMITHWICK, M.D.*

PAIN of various abdominal disorders may be eliminated or reduced by sympathectomy but in some cases persists unchanged after operation.

True visceral pain is probably abolished by total denervation and relieved by resection on one side. But distressing sensations may still be felt by other pathways or from the peritoneal structures involved.

In patients with hypertension, vasospasm, and other ailments, the gastrointestinal and biliary tracts were distended artificially before and after operation. Sensitivity was noted by John R. Bingham, M.D., University of Toronto, and Franz J. Ingelfinger, M.D., and Reginald H. Smithwick, M.D., of Evans Memorial and Massachusetts Memorial hospitals and Boston University.

Effects of surgery on symptoms of peptic ulcer, biliary disease, gastrointestinal dysfunction, dysmenorrhea, and childbirth were also recorded.

When lower thoracic sympathetic chains and splanchnic nerves are removed on both sides, intrinsic pain arising from the common duct and small intestine is eliminated.

Lumbodorsal sympathectomy abolishes pain from the ascending, transverse, and descending colon, though not from the lower sigmoid and rectum.

After unilateral sympathectomy, sensations are dulled but referred to the opposite side. Intractable abdominal pain originating in a midline organ may be relieved by operation on right or left.

In some cases heartburn, bloating, and cramps continue after bilateral splanchnicectomy and ganglionectomy from T8 to L_2. However, intestinal pathways interrupted by sympathectomy are still insensible one to six years later.

* The effects of sympathectomy on abdominal pain in man. Gastroenterology 15:18-33, 1950.

Selecting Patients for Lumbar Sympathectomy

TRAVIS WINSOR, M.D.*
University of Southern California, Los Angeles

THE pneumoplethysmogram is of considerable value in demonstrating which patients with peripheral vascular disease will benefit from lumbar sympathectomy and is a much more sensitive indicator than skin temperature or resistance. Changes in the volume of an organ may be measured, thereby permitting estimation of the total blood flow.

The degrees of vasodilatation gained by 5 diagnostic methods were compared by means of the pneumoplethysmograph for 150 subjects by Travis Winsor, M.D. About one-third of the individuals were healthy, the rest had peripheral vascular disease.

With the patient supine, the limb is elevated for thirty seconds. A blood pressure cuff is inflated above the knee to 60 mm. of mercury higher than the systolic pressure. The limb is then returned to the horizontal position.

After fifteen minutes the cuff is suddenly released. The blood flow of the toe is recorded every fifteen seconds until a maximum is reached.

All extraneous influences—noises, pain, anxiety, and chilling—are avoided.

The tracing of a healthy, relaxed patient in a comfortable, warm environment has large wave forms of variable sizes, indicating labile vasomotor activity. Transitory environmental disturbances, such as drafts or noises, and technical errors may produce low waves, simulating organic vascular disease. If patients are tense and neurotic, wave forms are usually of low amplitude and volume of blood flow is reduced, as with vasoconstriction.

Healthy subjects show rapid increase of blood flow after the cuff is released, but little change in skin temperature. Patients with moderate vascular disease exhibit a similar response although to a lesser degree. Individuals with pronounced vascular disturbance have little or no change of blood flow.

In general, lumbar sympathectomy will be effective for patients who have a positive response on release of arterial occlusion. But a negative response does not preclude satisfactory results from sympathectomy.

Indirect heating is a simple, safe, and painless method which permits a comparatively accurate estimation of the benefit to be expected from sympathectomy. Two double-sized electric pads are applied to the patient's body and the vasomotor reactions are studied by means of continuous tracings of the plethysmograph as well as of the electronic recorder of skin temperature. Alpha, beta, and gamma waves occur in a frequency of 6, 1, and less than 1 cycle per minute, respectively.

Plethysmographic studies of 10 normal individuals showed that body cooling lowered the pulse, respira-

* Newer methods for selection of patients for lumbar sympathectomy. California Med. 72:342-349, 1950.

tion, and alpha, beta, and gamma waves and also reduced the relative toe volume. Body heating, on the other hand, resulted in high pulse waves with prominent dicrotic notches, coupled with small alpha, beta, and gamma waves, and an increase of the relative toe flow.

In patients with vascular disease, the appearance of large alpha and beta waves in the course of body heating indicates active vasomotor response and suggests that lumbar sympathectomy may materially increase the blood flow through the digits. Conversely, absence of these waves after body heating suggests that lumbar sympathectomy would be of little benefit.

Patients who have increased blood flow under the influence of *lumbar sympathetic block* benefit from lumbar sympathectomy. The danger of infection, neuritis, or procaine reaction cannot be excluded from this test, which should be done in a hospital or clinic. The method is not suitable for debilitated patients.

Positive establishment of the block is evidenced by dryness of the skin within ten to twenty minutes after injection of procaine and dermometric absence of sweat, signifying a lowering of the skin resistance. A submaximal increase in the skin temperature as well as of the peripheral flow following lumbar sympathetic block is suggestive of organic arterial disease.

In 15 patients, *ganglionic block* was produced by slow intravenous injection of 0.5 mg. per kilogram of body weight of SC 1950—a quarternary amine, 2.6 diethyl piperidinium bromide. In some cases an additional test was made with tetraethylammonium ion, Etamon. The results in predicting success of sympathectomy by these agents were less satisfactory than with all other methods tried except spinal anesthesia. The peripheral vascular effect of blocking of the autonomic ganglia with SC 1950 or Etamon is smaller than the vasodilatation following lumbar sympathectomy because the ganglionic block results in generalized vasodilatation wherein the blood is shunted away from the diseased limb.

Because of vasodilatation in both lower extremities combined with a fall of the systemic blood pressure, *spinal anesthesia* is of less diagnostic value than the other procedures.

PARKINSONIAN TREMOR is most effectively suppressed by cordotomy including the entire lateral column. Several types of incision have been employed by Leslie C. Oliver, M.D., of the West End Hospital for Nervous Diseases, London, England. When a 5-mm. cut affected only the posterior part of the column, one-third of the patients were relieved. Results were best when the lateral spinothalamic tract was involved, causing patchy contralateral analgesia. When the incision was widened to produce complete analgesia to a high level, improvement was satisfactory in 17 of 18 instances.

Lancet 258:847-848, 1950.

Diseases of the Orbit

WILLIAM L. BENEDICT, M.D.*
Mayo Clinic, Rochester, Minn.

An absolute differential diagnosis is often difficult with diseases of the orbit. Sometimes prolonged investigation and observation of orbital lesions are necessary, since many symptoms are similar in several different diseases.

Although a definite diagnosis is desirable before treatment is begun, William L. Benedict, M.D., suggests that in many cases of orbital disease, roentgen and radium therapy may be used both for early treatment and as a diagnostic measure. Occasionally, the condition is cured by such treatment without the establishment of any definite diagnosis.

Surgical intervention may also be used in treatment and in diagnosis. The performance of biopsy as a routine measure, however, is generally inadvisable. The danger of uncontrollable bleeding or of spreading malignant cells by opening a previously encapsulated tumor is often greater than the possible value of the information which might be gained.

If a specimen must be taken, further surgical treatment should not wait on a laboratory report. The surgeon should be prepared to undertake at the same time any operation indicated by the findings or by complications rising from the biopsy procedure.

Nearly all orbital diseases may be fitted into one of five categories: congenital, vascular, neoplastic, inflammatory, or endocrine. This classification excludes injuries to the orbit, which are not strictly diseases.

Most of the congenital orbital conditions are easily diagnosed and cannot be corrected. Extensive interference with the growth of the skull before birth prevents proper function and, sometimes, development of the eyes. Malnutrition, especially vitamin A deficiency, may also affect the orbit during intrauterine life.

Although most slow-growing, space-occupying lesions of the orbit are neoplastic, the vascular diseases often show a similar development. Differentiation between neoplastic and vascular lesions may be simplified by dividing the orbit arbitrarily into three zones, vertically, and three anatomic divisions, horizontally (see illustration).

The three zones are anterior, middle, and posterior; lesions, particularly tumors, situated in any one of these zones tend to have similar signs and symptoms. The three divisions are determined by the anatomic structure of the orbit and consist of the subperiosteal region, the area between the periosteum and the muscle cone, and the muscle cone itself.

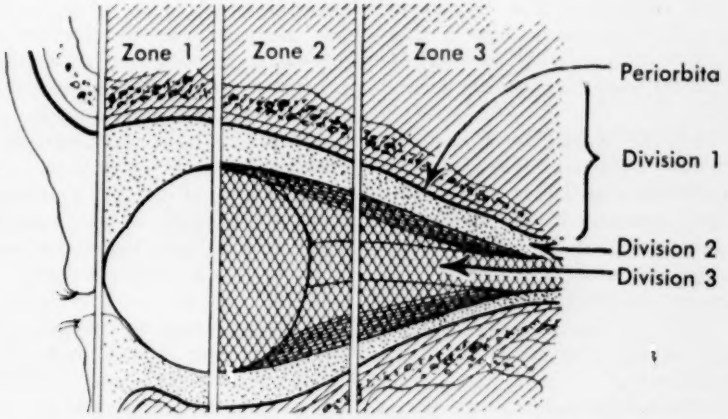
Although tumors and space-occupying lesions may be found in all three divisions, the greatest number are found in the second. In this and in

* Diseases of the orbit. Am. J. Ophth. 33:1-10, 1950.

the subperiosteal region, lesions may be found throughout the orbit, but within the muscle cone only the middle and posterior zones are involved.

Neoplastic and inflammatory lesions may arise in the subperiosteal region, but rarely vascular diseases.

Zones and Divisions



The occasional example of the latter condition which may arise outside the periosteum and invade the orbit is easily detected by orbital signs and roentgenograms. Cranial meningioma is the neoplasm most likely to enter through the periorbita. Hyperostosis is so frequent a finding with meningioma as to be almost diagnostic; nevertheless, some vascular lesions such as hemangioma may also give rise to a similar thickening of the sphenoidal ridge along the roof of the orbit while some meningiomas do not.

Most lesions in this first anatomic division arise in the middle and posterior zones of the orbit, except for the inflammatory diseases and true osteomas, which originate respectively in the frontal sinus and in the ethmoidal cells. Diagnosis of true osteomas is not difficult since roentgenograms reveal the condition.

The greatest variety of neoplastic and vascular diseases are found in the second division of the orbit, between the periosteum and the muscle cone. Endotheliomas are particularly common in this region. Neoplasms, which may be either metastatic or primary, usually cause proptosis and displacement of the eyeball, especially when the growth is located in the posterior zone. Since slow-growing tumors or aneurysms tend to grow in the direction of least resistance, proptosis may not begin until some time after the appearance of the lesion which may, by then, be as large as the globe.

Vascular tumors of this middle division of the orbit are not always distinguishable from solid tumors by physical findings alone. Because of a constant process of thrombosis and

absorption, however, these vascular aneurysms and hemangiomas often cause distinctive signs which may aid diagnosis. Fluctuations in the degree of proptosis, sometimes to the point of complete disappearance, usually indicate a vascular tumor with thrombosed aneurysm. A bluish discoloration around the eyelids is also suggestive of vascular disease. Blood cut off from circulation in a thrombosed area will break down into a thin, colored fluid and escape through the walls of the aneurysm into the orbital tissues.

Within the muscle cone, most tumors are neurofibromas, gliomas, or endotheliomas which arise from the optic nerve or sheath. Lesions in this anatomic division usually produce proptosis without lateral displacement of the eye. Pressure from the tumor on the posterior wall of the globe may also cause the retina to wrinkle.

Absolute diagnosis of any tumor is not essential, since the growth should be totally removed when possible. Rather, investigation should determine whether the signs of orbital lesion are caused by a tumor or some other disturbance.

Differentiation is sometimes difficult between the inflammatory and endocrinous diseases of the orbit. The lesions within this overlapping field, called pseudotumor, may be classified into three groups.

Those in group 1 show a syndrome of benign or malignant tumor which disappears spontaneously or after therapy. Clinical findings in group 2 indicate an orbital tumor, but surgery fails to disclose any growth. In group 3 a tumor is present consisting of chronic inflammatory rather than neoplastic tissue. The exophthalmos which accompanies the pseudotumors of group 2, the most common type of this lesion, can probably be explained by some condition such as malignant hypertension, orbital cellulitis, thyroid disease, or syphilis.

Although acute inflammatory diseases are most often produced by infection in the nasal accessory sinuses, primary acute inflammation of the orbit arises from foci of infection and from constitutional diseases, such as typhoid fever, rheumatism, tuberculosis, and syphilis. The orbit is probably susceptible to any infectious disease of the body.

REPOSITORY PENICILLIN FOR YAWS is safe and effective and makes eradication of the disease a possibility. After injection of 1,200,000 or 2,400,000 units in two to four days, early lesions heal rapidly and completely, though serologic recovery is slow. Charles R. Rein, M.D., of New York University, New York City, and associates employed crystalline sodium penicillin G in peanut oil and beeswax with great success for several thousand Haitians. Even more satisfactory is the product with aluminum monostearate, which causes fewer undesirable reactions. A single dose of 4 cc. is apparently adequate.

J. Invest. Dermat. 14:239-246, 1950.

Medical Forum

Discussion of articles published in MODERN MEDICINE *is always welcome. Address all communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Functional Sterility and Amenorrhea*

TO THE EDITORS: The remarks of Dr. Sonya A. Monen in your Medical Forum of May 1, 1950, p. 86, interest me very much.

I have been treating sterility patients with x-ray therapy for more than twenty-five years and have not—except in 1 probable case in over 400—found any abnormality in the progeny of women so treated. The woman whose first child was abnormal subsequently bore 2 normal children.

The possibility of future mutation abnormality is a scare pronouncement based solely on insect and rodent study and not on investigation in human beings. I now have observed 2 children of children born to irradiated mothers; these grandchildren, both boys, are perfectly normal. The report of the first grandchild was made in the *American Journal of Obstetrics and Gynecology*, 1948. Another daughter of an irradiated mother is now pregnant.

Another fact might interest Dr. Monen. No woman reaches the radiation therapist for x-ray therapy of sterility until all other procedures have been tried and tried and tried, including endocrine therapy. Many of the patients were literally pincushions from endocrine injections before they came to me.

IRA I. KAPLAN, M.D.
New York City

Radical Treatment of Abortion*

TO THE EDITORS: There are many advantages to the complete emptying of the uterine cavity following a so-called complete or incomplete abortion, as described by Drs. Henry B. Safford and Edmund F. Longworth. During residency training I had occasion to observe the results on two distinct services.

On one service, the staff physician would care for the patients only in a so-called conservative manner, which consisted largely of supportive therapy, the use of blood and oxytocic preparations.

On the other service, the physician felt that all incomplete or reasonably complete abortions, even aseptic ones, should be curetted almost upon admission to the hospital. The immediacy of the opera-

*MODERN MEDICINE, Mar. 1, 1950, p. 57.

*MODERN MEDICINE, June 1, 1950, p. 54.

tion was based on whether there was evidence of infection and on whether the white count, the sedimentation rate, or both were elevated. With fluids, blood transfusions, and antibiotics, the patient was prepared for surgery, taken to the operating room, and an adequate and complete curettement of the uterine cavity was carried out.

Experience showed that the patients did best if curetted as soon as their fluid balance was corrected and their general physical condition, such as blood pressure and so forth, was satisfactory for a relatively minor general anesthetic procedure.

I arrived at the following conclusions in regard to advantages of curetting in abortion cases:

► *Conservation of blood.* The woman who bleeds a little over a long period of time will in the end have a lower hemoglobin level and a greater blood loss than the woman who is given oxytocics and antibiotics and whose uterus is completely emptied.

► *Decreased morbidity.* With the emptying of the uterine cavity the patient's temperature usually drops to normal almost immediately and remains so. Patients who were allowed to remain in bed without surgery seemed to spike low-grade fevers over a long period of time and, on pelvic examination, induration and tenderness in the adnexa as well as the uterus were often found.

► *Shortened hospital stay.* The average length of stay for the women with immediate curettage was around three or four days. Those who were allowed to remain without surgery were, in many instances, in the hospital as long as three weeks. The average stay was fourteen to fifteen days.

► *Economic.* The economic advantages to the patient and to the hospital are obvious since the hospitalization period is much shorter and the number of transfusions is much less.

► *Rapid return to a physiologic menstrual cycle.* The surgically-treated group returned to a normal state much faster than those who had been allowed to continue with what must have been some remnants of the products of conception in the uterus.

It is my opinion then, based on this clinic experience as well as on my own private practice, that there is only one method to approach the problem of abortion: The uterus should be routinely emptied of any of the remaining products of conception.

EDGAR G. INGALLS, M.D.
Minneapolis

Types of Vertigo*

TO THE EDITORS: Dr. Kinsey M. Simonton has provided a brief résumé of the causes of vertigo which should be of help to the busy physician. Allergy may be added as a further cause.

Vertigo and dizziness are too often used to name anything that makes an individual unsteady. Many physicians suggest an aural source for the symptoms when the cause is often vascular, particularly in the senile. Differentiation is essential.

An accurate history is important and the patient must be guided into a clear understanding of the difference between vertigo and dizziness or the milder conditions of unsteadiness or confusion. Many patients are unable to state the symptoms clearly and find them hard to explain. Diagnosis is difficult at times and some cases appear to be neurotic in origin.

A. L. CREWSON, M.D.
Cornwall, Ont.

*MODERN MEDICINE, Dec. 15, 1949, p. 66.

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especially in infancy, ranging from permanent deafness to suppurative dislocation of the hip, make it imperative to institute prompt treatment of otitis with a rapidly acting, powerful antibacterial agent. Furacin Anhydrous Ear Solution has often demonstrated its effectiveness when other medicaments have failed.* Its wide antibacterial spectrum encompasses the majority of pathogens concerned; it is effective in the presence of pus. Furacin® brand of nitrofurazone N.N.R. is available in 0.2 per cent concentration in water-miscible vehicles. It is indicated for topical application *in the prophylaxis or treatment of surface infections* of wounds, severe burns, cutaneous ulcers, pyodermas, skin grafts and bacterial otitis. *Literature on request.*

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*Douglass, C.: *The Use of Furacin in the Treatment of Aural Infections,* Laryngoscope 58:1274, 1948.

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Diagnostix

Here are diagnostic challenges presented as they confront the consultant from the first clue to the pathologic report. Diagnosis from the Clue requires unusual acumen and luck; from Part II, perspicacity; from Part III, discernment.

Case MM-174

THE CLUE

ATTENDING M.D: I want you to see a thirty-seven-year-old housewife who says she was never sick until nine months ago. Since then she has had three successive attacks of illness. The events are so similar that I believe a description of the present attack will adequately cover the other two. Briefly, for two weeks the patient has had general malaise, headache, and fleeting pains in the joints. Though no fever occurred at first, temperature soon rose.

VISITING M.D: What joints were involved?

ATTENDING M.D: Knees, shoulders, and fingers. The temperature was between 102 and 104° and the general malaise persisted. Coincident with the rise in temperature, nodules about the size of hazelnuts appeared in the subcutaneous tissue of the trunk and extremities.

PART II

VISITING M.D: Sensitive to pressure?

ATTENDING M.D: Yes, quite. And the skin over them was slightly cyanotic. After about three days the nodules became firmer and, within a week, were gone. However, in the course of three or four weeks, new nodules have appeared while others have gradually disappeared. Temperature has been intermittently elevated in relation to behavior of the nodules.

VISITING M.D: Please give me the significant laboratory findings.

ATTENDING M.D: Slight anemia was noted, moderate leukocytosis, and normal differential percentages.

VISITING M.D: What do you mean by moderate leukocytosis?

ATTENDING M.D: Under 12,000 to 13,000. Blood culture was negative, Mantoux was negative, and repeated Wassermanns and Kahns were positive.

VISITING M.D: Let's see the patient and discuss this after I have examined her. *(Examining patient)* The abdomen is distended; there is edema of the legs; a few ecchymoses in the gluteal regions and, I would say, slight ascites. I note some abdominal tenderness. She may have peritonitis.

ATTENDING M.D: The edema started just twenty-four hours ago and the abdomen began to distend then, too.

VISITING M.D: Please give me the significant findings of each of the three episodes and a better chronologic story.

ATTENDING M.D: The first attack went from June to August. Some harden-

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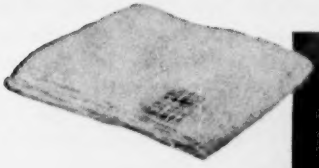

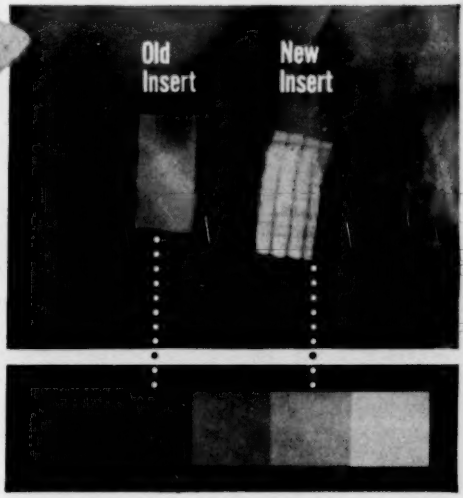

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ing occurred in the left calf and right thigh, also weakness, inability to work, headaches, and joint pains. Then came three weeks without symptoms. From September to November the legs swelled, she had diarrhea and abdominal and retrosternal pain and was unable to work. A biopsy of a tender nodule in the left inguinal region was called lipogranuloma. The third attack followed an interval of one month without symptoms. This last attack started two months ago in December and still continues. Several nodules have appeared in the groin, forearm, hand, and thigh, with return of retrosternal pain, chills, and night sweats. She had no fever at first, then gradual rise in temperature as the nodules appeared. The most recent symptoms are edema of the lower extremities up to the gluteal region, vomiting, and peritoneal symptoms.

VISITING M.D: She has a fresh bandage on the right forearm. What did the biopsy show this time?

PART III

ATTENDING M.D: The pathologist called it "suppurative inflammation of the adipose tissue."

VISITING M.D: At first I thought this was some primary disease of the blood vessels, perhaps periarteritis nodosa, but I notice she has never had eosinophilia, marked leukocytosis, hypertension, or urinary symptoms, so I doubt that this is the case. I don't know how we can be sure this isn't tertiary syphilis . . .

ATTENDING M.D: Treatment with penicillin and potassium iodide has had no effect.

VISITING M.D: I think the situation we are now seeing is a terminal one, probably a thrombosis of the inferior vena cava, but I must confess I don't know why I think that. Perhaps because of peritonitis. I am glad to see she is getting large doses of antibiotics.

PART IV

PATHOLOGIST: *(Three days later; at autopsy following the gradual decline and death of the patient)* We are dealing with the so-called Weber-Christian syndrome, or nodular inflammatory lesions in the panniculus adiposus with consecutive crops in the trunk and legs, attendant fever, and nodules. In the very few cases reported, a concurrent infection was often found. This patient had hemolytic streptococcic peritonitis. Rheumatoid symptoms in the muscles and joints were described, as well as positive serologic tests for syphilis without other evidence of the disease. Actually, there was an acute flare-up of symptoms following iodine or bromine preparations.

VISITING M.D: What was the cause of death? I presume acute suppurative peritonitis.

PATHOLOGIST: Yes. But no local cause was found. Perhaps it was a hematogenous infection.

VISITING M.D: Was there thrombosis in the inferior vena cava?

PATHOLOGIST: We found no evidence of phlebitis or of thromboses; but there may have been thromboses beyond where we were able to examine. The pathologic findings

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Bacitracin Ointment-C.S.C. contains 500 units of bacitracin per gram. It has produced excellent results in the treatment of ecthyma, infectious eczematoid dermatitis, folliculitis, sycosis vulgaris, and pyoderma gangrenosum. In decubitus ulcer it not only controls the infection promptly but also encourages more rapid healing. Impetigo contagiosa responds particularly well, many cases completely clearing up within 48 hours of the initiation of therapy.

*Derzavis, J. L.; Rice, J. S., and Leland, L. S.: Topical Bacitracin Therapy of Pyogenic Dermatoses; a Clinical Report, J.A.M.A. *141*:191 (Sept. 17) 1949.

C.S.C. Pharmaceuticals

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were really limited to inflammatory changes in the panniculus adiposus of the abdomen and thorax. No bacteria were found in the adipose tissue lesions, and it is probable that the nonsuppurative changes have no specific significance but are due to tissue damage by fatty substances liberated in the destruction of fat cells. A remark about the so-called "lipogranuloma": Some reports of this are quite similar to what we think of as Weber-Christian syndrome.

VISITING M.D: There are probably about 35 cases of the syndrome in the literature. I should have hit the diagnosis, because I have seen 1 case before. There have been probably less than half a dozen fatal cases few of which were examined post mortem.

Flexible Stilet for Intestinal Intubation

Difficulties in passage of a tube for intestinal intubation may be overcome by employing a flexible stilet with a controllable tip. Such a device, described by Drs. Grafton A. Smith and Edwin L. Brackney of the University of Minnesota, Minneapolis, has been successfully used for intubation of 22 of 23 patients with intestinal obstruction. The tip of the stilet is made of a flat spring enclosed within a coiled spring. Two fine wires attached to the point thread through the coiled spring into a flexible inner coil of flat wire 5 in. long. The body of the stilet is a more heavily constructed coil spring, 4½ ft. long, through which the two control wires and a third wire connected to the junction of the body and the inner coil pass. The wires are attached to a large lever in the handle. The lever moves through a 120° arc and turns the tip 180 degrees. Pressure on a thumb lever on the side of the handle tightens the third wire and stiffens the body of the stilet. A 9-ft. Koroseal tube is used with a small Lucite plug cemented into the end. Two holes on opposite sides of the plug connect with the lumen of the tube. A latex balloon is tied to the tubing just behind the plug and a small plastic inflating tube is attached. A hole in the wall of the tubing is cut 4 ft. 9 in. from the balloon to admit the stilet. Both tube and stilet are lubricated with instrument oil and the stilet is inserted into the tube to 1 in. from the plug. The patient is placed supine on a fluoroscopy table with a Wangensteen duodenal tube in the stomach, which is distended with 800 to 1,000 cc. of air. The tube, with stilet in place, is introduced through the mouth or nose into the cardiac portion of the stomach. The tip is turned to the patient's right and the tube and stilet advanced to the pylorus. The tip is then straightened, the body of the stilet stiffened, and the tube advanced into the duodenum. The stilet is withdrawn, the balloon inflated with 20 cc. of air, and the hole in the side of the tube is closed.

Surgery 27:817-821, 1950.

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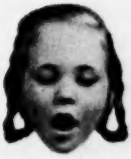

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Short Reports

HEMATOLOGY

Effect of Ultrasonics on Blood Elements

Leukocytes from patients with leukemia are more resistant to ultrasonic vibration than are those from healthy persons. Patrice L. Morrow and associates of National Institutes of Health, Bethesda, Md., and University of California, San Francisco, find that 50% of leukocytes from leukemic patients are destroyed within 6.6 to 23 minutes. The corresponding time for leukocytes of healthy persons is 1.69 to 6.75 minutes. Whether leukemic cells survive for a longer period in the body is unknown.

J. Nat. Cancer Inst. 10:843-859, 1950.

ANTIBIOTICS

Postpartum Complications

Possibility of infection after delivery is decreased by aureomycin. Effective when given orally, the drug is active against most of the organisms contained in the normal postpartum uterus and has no serious toxic effects. Daily doses of 2 gm. begun early in labor and continued two or three days after delivery usually prevent maternal infection. Also placental and mammary transfer occurs rapidly and in high concentrations. Dr. Joseph A. Guilbeau, Jr., and associates of Johns Hopkins University, Baltimore, obtained postpartum uterine cultures from 109 patients who were receiving aureomycin hydrochloride and from 24 who were not. Cultures were positive for 11.9% of the treated patients and for 75% of the untreated. Infections such as peritonitis, endometritis, parametritis, as well as infected abortions and intrapartum infections are effectively treated with aureomycin. Acute and chronic urinary tract infections during pregnancy may be improved but relapse upon cessation of treatment is frequent.

J.A.M.A. 143:520-526, 1950.

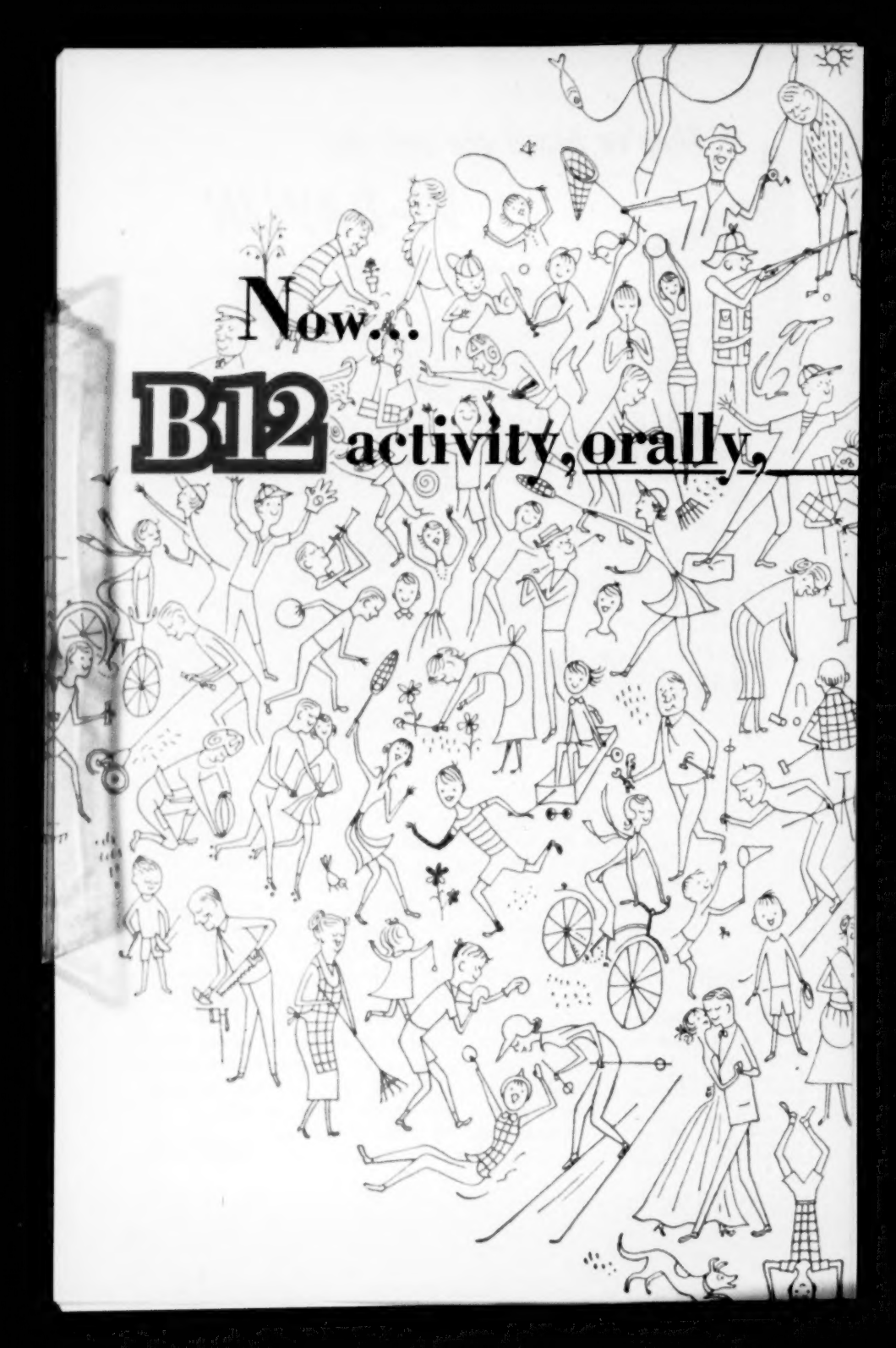
PEDIATRICS

Acute Bacillary Dysentery

A triple sulfonamide mixture containing equal amounts of sulfadiazine, sulfamerazine, and sulfacetimide will cure most children with acute bacillary dysentery. Dr. David Lehr and associates of New York Medical College, New York City, recommend a daily dosage of 0.2 gm. of the triple sulfa mixture per kilogram of body weight. Sodium bicarbonate need not be given. Of 24 children with acute bacillary dysentery due to *Shigella sonnei*, 20 were cured by this therapy. Sulfadiazine alone or a nonabsorbable preparation, phthalylsulfacetimide, produced cures in a smaller percentage of patients.

Federation Proc. 9:295, 1950.

(Continued on page 82)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Appetite-Building Activity. In addition to being the most important hematopoietic principle in liver, vitamin B_{12} appears to reinforce the action of other B complex factors in cellular metabolism and growth, and in rebuilding appetite.

Each ounce of pleasant-tasting Beta-Concemin Ferrated supplies the activity of 12 mcgm. of vitamin B_{12} as contributed by vitamin B_{12} concentrate augmented by a special fraction of liver, as determined by microbiological assay. Other B factors are present in excess of established minimum daily requirements.

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1828
CINCINNATI • U. S. A.

[1] Rezinkoff, P.: Med. Clin. N. Amer. 28:368, 1944.
[2] Teeter, E. J.: J. A. M. A. 127:976, 1945.
[3] Haden, R. L.: Principles of Hematology, Lea and Febiger, Philadelphia, 1940.
Beta-Concemin ®

RADIOLOGY

Three-dimensional Heart Radiograms

Angiocardiography with simultaneous exposures in 2 projections at right angles can now produce roentgenograms which, when placed side by side, permit a three-dimensional appreciation of the capacity and configuration of the separate chambers of the heart. A specially constructed motorized table synchronizes frontal and lateral exposures. The device described by Drs. O. Axén and John Lind has been in successful operation at Norrtulls Hospital, Stockholm, for three years. After positioning of the patient on the table and injection of contrast medium a flip of a switch starts the automatic transfer of cassettes from the magazines to exposure fields and simultaneously energizes the x-ray tubes. An appropriate number of cassettes is chosen so that the heart is shown empty at the beginning and end of the series. The table permits up to 10 roentgenograms in each plane within a period of five to ten seconds. The speed may be varied within that range. An electrocardiogram is made during the procedure to fix precisely the time between exposures and to register the heart phase in which each exposure was made.

J.A.M.A. 143:540-542, 1950.

ONCOLOGY

Induced Cancer

Methylcholanthrene, a potent carcinogen, causes mammary tumors of varying histologic types when repeatedly applied to the skin of mice. Skin tumors also occur and occasionally leukemia develops. Drs. Howard B. Andervont and Thelma B. Dunn of National Institutes of Health, Bethesda, Md., find that methylcholanthrene can cause tumor in nontumor-agent bearing strains of mice. The incidence of tumor formation is lower in the absence of the tumor agent.

J. Nat. Cancer Inst. 10:895-925, 1950.

PHARMACOLOGY

Nicotine Absorption

Tobacco chewing causes a greater absorption of nicotine than does cigaret smoking. Drs. William A. Wolff and W. E. Giles of the Bowman Gray School of Medicine, Winston-Salem, N.C., find that habitual tobacco chewers absorb from 8 to 87.7 mg. of nicotine during about eight hours of chewing. The nicotine blood level may rise to as high as 0.56 mg. per liter after chewing tobacco. The increase in blood nicotine is smaller if tobacco is smoked instead of chewed.

Federation Proc. 9:248, 1950.

AWARDS

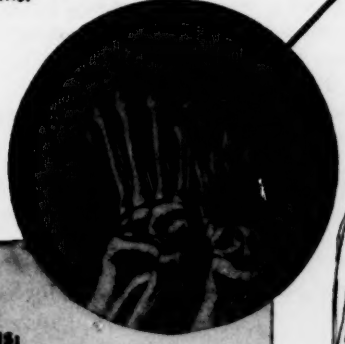
Brazilian Honored

The gold medal and certificate of merit of the American College of Chest physicians has been awarded for the first time to a scientist outside the United States. Dr. Manoel de Abreu of the Faculty of Medical Science, Rio de Janeiro, has received the honor in recognition of his work on low cost equipment and methods for making chest surveys.

Good Grip Restored

In arthritis involving the hands, hips or any other joints, restoration of function and diminution of pain are best accomplished by complete systemic rehabilitation.

Darthronol—furnishing the antiarthritic effects of massive dosage of Vitamin D and the nutritional benefits of 8 other vitamins—plays an important role in the rehabilitation of patients afflicted with chronic arthritis.



EACH CAPSULE CONTAINS:

Vitamin D (Irradiated Ergosterol)	50,000 U.S.P. Units
Vitamin A (Fish Liver Oil)	5,000 U.S.P. Units
Vitamin C (Ascorbic Acid)	75 mg.
Vitamin B_1 (Thiamine Hydrochloride)	3 mg.
Vitamin B_2 (Riboflavin)	2 mg.
Vitamin B_6 (Pyridoxine Hydrochloride)	0.3 mg.
Niacinamide	15 mg.
Calcium Pantothenate	1 mg.
Mixed Tocopherols (Equivalent to 3 mg. of Synthetic Alpha Tocopherol)	4 mg.

CAUTION: To be dispensed only on the prescription of a physician.

Darthronol

for the ARTHRITIC

J. B. ROERIG & COMPANY • 536 LAKE SHORE DRIVE, CHICAGO 11, ILL.

EPIDEMIOLOGY

Salmonella in Hen Eggs

The potential hazard of *Salmonella* infection from uncooked hen eggs is greater than is generally realized. Dr. Irving H. Borts and associates of the State University of Iowa, Iowa City, report that *Salmonella* were cultured from 6 of 186 eggs tested, or from 3.2%. *S. paratyphi B* was recovered in 1 instance, *S. pullorum* in 5. The tests were made on fresh eggs which were purchased for institutional use in 30-dozen lots. The 186 eggs were taken from 56 different 30-dozen lots. All the eggs were handled just as the cook at the institutions might have handled them in making eggnogs or mayonnaise. Each was immersed for two minutes in hot water, drained, broken into a mixing bowl and beaten. A 30-cc. sample of the egg melange was then pipetted into a covered beaker and cultures were made.

Pub. Health Rep. 65:778-781, 1950.

HEMATOLOGY

Renal Injury from PGA

Guinea pigs' kidneys may be injured by pteroylglutamic acid, as evidenced by tubular casts and dilated obstructed nephrons. The tubular casts may consist of precipitated PGA. Dr. James R. Dawson, Jr., and associates of Vanderbilt University, Nashville, find that the addition of cabbage to the basal diet of milk, oats, bran, cottonseed oil, salt, and cod-liver oil prevents the development of renal injury. The mechanism of protection is unknown.

Proc. Soc. Exper. Biol. & Med. 73:646-650, 1950.

SURGERY

New Suture Material

A synthetic fiber, Fortisan, a regenerated cellulose yarn of considerably greater tensile strength than silk or cotton, has been satisfactorily employed for wound closures by Dr. Joseph K. Narat and associates of St. Elizabeth Hospital, Chicago. Fortisan is nonabsorbable. Advantages other than strength are uniformity of size, pliability, dimensional stability when wet, and ability to withstand repeated autoclaving. Tissue reaction is slight and no instance of allergy to Fortisan has been observed.

Arch. Surg. 60:1218-1230, 1950.

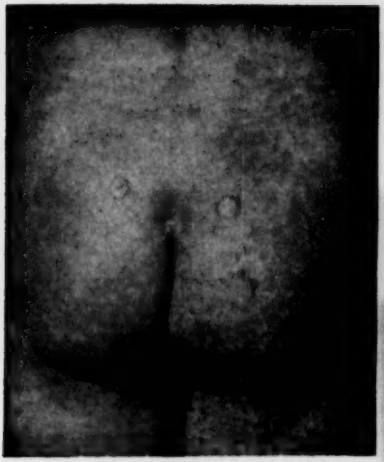
MEDICINE

Tobacco and Lung Cancer

Prolonged excessive cigaret smoking appears to be an important factor in the development of cancer of the bronchus. More than 9 of 10 men with bronchogenic carcinoma are at least moderately heavy cigaret smokers. Drs. Ernest L. Wynder and Evarts A. Graham of Washington University, St. Louis, find almost 3 times as many chain cigaret smokers among patients with cancer of the bronchus as among male hospital patients without cancer. Of 650 men with bronchogenic carcinoma 94.1% smoked cigarets, 4% used pipes, and 3.5% were cigar smokers. The greater tendency to inhale cigaret smoke than cigar or pipe smoke probably explains the high incidence of cigaret users in the group with cancer. Bronchogenic carcinoma is rare in a man who smokes little or not at all.

J.A.M.A. 143:329-336, 1950.

(Left) Psoriasis of 15 years' duration



(Right) Same case after 5 weeks with Mazon

Symptomatic Relief First

before confronting the vagaries of psoriasis

• Facing the bewildering and erratic behavior of psoriasis, the clinician logically turns to localized treatment first before instituting more generalized therapy.

With Mazon, a compound of mercury salicylate, benzoic acid, sodium stearate, salicylic acid and tars, progress of the lesions is arrested and symptomatic relief is quickly accomplished.

As demonstrated for over 25 years, Mazon acts efficiently in psoriasis when systemic or metabolic involvement is not indicated. Its non-staining, non-greasy and generally agreeable properties promote patient acceptance.

BELMONT LABORATORIES, Philadelphia, Pa.

MAZON

PEDIATRICS

Occurrence of Agglutinins in Infantile Diarrhea

Elevated cold and streptococcus MG agglutinins may be found in infants with gastroenteritis of unknown etiology. Although the significance has not been determined, Dr. Hans G. Keitel of Harvard University, Boston, suggests that titers of streptococcus MG agglutinins over 1:10 dilution and of cold agglutinins over 1:60 may be helpful in differential diagnosis. At Fort Hamilton Station Hospital, Brooklyn, 44 infants with gastroenteritis, dependents of Army personnel, were examined. In 24 instances streptococcus MG titers of 1:10 or more were found. Agglutinins were not present the first week of illness but rose sharply and became positive in 80% during the second week. After reaching a peak in the third week, titers slowly declined. In general, the height of the titer corresponded with the severity of the gastroenteritis. Because the blood samples in most instances were refrigerated before the sera were separated, cold agglutinins were obtained in only 7 cases. All of these had cold agglutinins between the second and fifth week of illness which appeared in dilutions of 1:64 to 1:256. In addition, 6 of the 7 had positive streptococcus MG agglutinins at some time during illness.

J. Infect. Dis. 86:219-222, 1950.

EDUCATION

Cancer Research Laboratory

Construction has begun on a $350,000 laboratory for cancer research at Yale University, New Haven. The building will be ready for occupancy next spring.

"Now don't worry, Harry. Just take the cathartic as I told you to do and everything will come out all right."

Life's Weary Moments

Think of a gag that fits the illustration. For every issue a new gag is published and the author is sent $5. The September 1 winner is

T. S. Buckler, M.D.
Jackson Heights, N.Y.

Mail your caption to
The Cartoon Editor
Caption Contest
No. 1
MODERN MEDICINE
84 South 10th St.
Minneapolis 3, Minn.

Accepted for advertising in the Journal of the AMERICAN MEDICAL ASS'N

When low-sodium dieters complain their food tastes like hay...

Diasal is a new, improved type of salt substitute.

It has the crystalline look of salt – virtually *duplicates the taste of salt! Diasal* gives a real salty flavor to flat-tasting, salt-free diet foods. It enables bored dieters to keep on with their diets – *promotes patient cooperation. Contains no lithium.*

Diasal is used just like salt, at the table and in cooking.

Constituents: potassium chloride, glutamic acid and inert excipients combined to stimulate food flavors, without bitterness or after-taste. Diasal may be freely prescribed as a diet adjunct in conditions of congestive heart failure, hypertension, arteriosclerosis and edemas of pregnancy.

Available in 2 oz. shakers and 8 oz. bottles.

DIASAL®

restores flavor and taste

no sodium · no lithium

For SAMPLE SHAKERS and low-sodium DIET SHEETS for several patients, write E. Fougera & Co. Inc. 75 Varick St., New York 13, N. Y.

Canadian Distributors:
Rougier Freres, Montreal

the best of Protein

Here is an exceptionally pleasant-tasting new dietary supplement for management of anorexia, febrile illnesses, convalescence, malnutrition, pregnancy and lactation.
The formula tells the story:

Each 45 cc. (3 tablespoonfuls) of *Tronic* provides:

Protein hydrolysate (45% amino acids)	6.8 Gm.	*Calcium glycerophosphate*	130 mg.
Thiamine HCl (vitamin B_1)	4 mg.	*Sodium glycerophosphate*	260 mg.
Riboflavin (vitamin B_2)	2 mg.	*Potassium glycerophosphate*	24 mg.
Pyridoxine HCl (vitamin B_6)	1 mg.	*Manganese glycerophosphate*	16 mg.
Niacinamide	30 mg.	*Alcohol*	17%

Tronic Compound is an unusually complete, well formulated nutritional supplement, and will be found particularly useful for geriatric and pediatric patients, as well as in other branches of medicine. Supplied in *Spasaver*® pints and gallon bottles.
Sharp & Dohme, Philadelphia 1, Pa.

SHARP & DOHME

...and B Complex Vitamins!

Tronic.®

Compound

TREATMENT

Intravenous Tetracaine

Symptomatic relief in a variety of inflammatory and painful conditions may be obtained by the intravenous injection of tetracaine hydrochloride, pontocaine, which apparently exerts antihistaminic, analgesic, and antispasmodic effects. The drug seems to have a selective affinity for inflamed or traumatized tissue and, by improving local circulation in the injured region, alters the pathophysiologic state. Pontocaine may also act directly on hyperirritable or hypersensitive nerve tissue. An injection of 10 cc. of 0.25% solution is given slowly over a period of three to five minutes. Although toxicity is slight with slow administration, three untoward effects must be watched for: [1] allergy to the drug, [2] total vasomotor collapse, such as sometimes follows induction of nerve block and infiltration, and [3] the typical reaction to local anesthetization which is ushered in by convulsions and excitement and proceeds to medullary paralysis and respiratory failure. Treatment should be halted immediately upon any sign of increased excitement, talkativeness, restlessness, muscular twitching, skin reaction, or dyspnea. Dr. J. S. Horan of the University of Tennessee, Memphis, reports a total of 204 infusions of pontocaine to 104 patients with only 2 instances of side effects—slight nausea in 1 patient and syncope in the other. Improvement was obtained for 19 of 20 patients with arthritis, 10 of 11 with complications of leprosy, 16 of 18 with low back pain, and 9 of 10 with muscle strain. Each of 11 patients with asthma was freed of respiratory embarrassment.

Arch. Int. Med. 85:972-979, 1950.

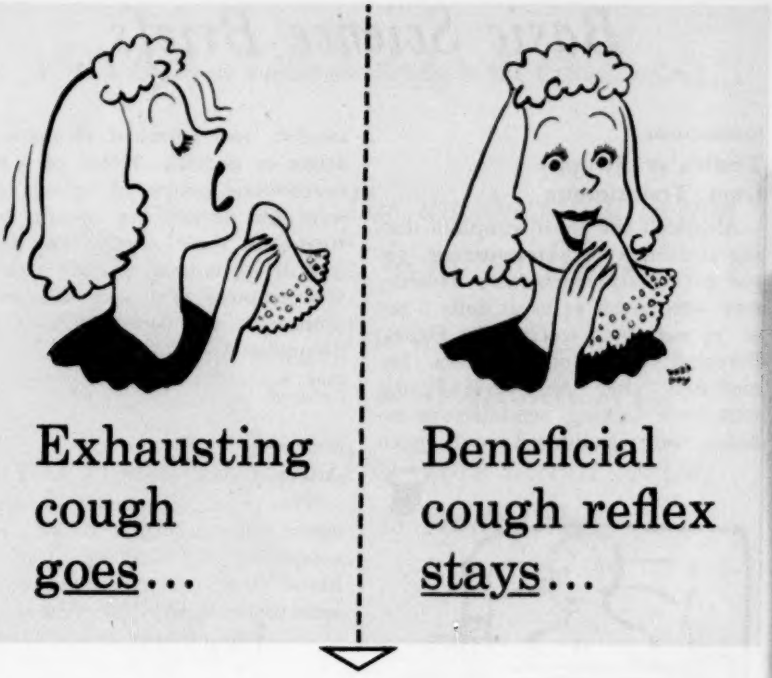
Doctor to Doctor

Think of a gag that fits the illustration. For every issue a new gag is published and the author is sent $5. The Sept. 1 winner is

Fred Lowenthal, M.D.
Brookline, Mass.

Mail your caption to
The Cartoon Editor
Caption Contest
No. 2
MODERN MEDICINE
84 South 10th St.
Minneapolis 3, Minn.

"And here I thought you were in your car when it drove off just a minute ago."



MERCODOL provides prompt, selective relief that doesn't interfere with the cough reflex needed to keep throat passages and bronchioles clear.

This complete, pleasant-tasting prescription contains a *selective* cough-controlling narcotic[1] that doesn't impair the beneficial cough reflex . . . an effective bronchodilator[2] to relax plugged bronchioles . . . an expectorant[3] to liquefy secretions. Remarkably free from nausea, constipation, retention of sputum, and cardiovascular or nervous stimulation.

MERCODOL®

THE ANTITUSSIVE SYRUP THAT CONTROLS COUGH—*KEEPS* THE COUGH REFLEX

An exempt narcotic

MERCODOL with **DECAPRYN®**
for the cough with a specific allergic basis.

Merrell
1828
CINCINNATI • U.S.A.

Each 30 cc. contains:

[1] Mercodinone®	10.0 mg.
[2] Nethamine® Hydrochloride	0.1 Gm.
[3] Sodium Citrate	1.2 Gm.

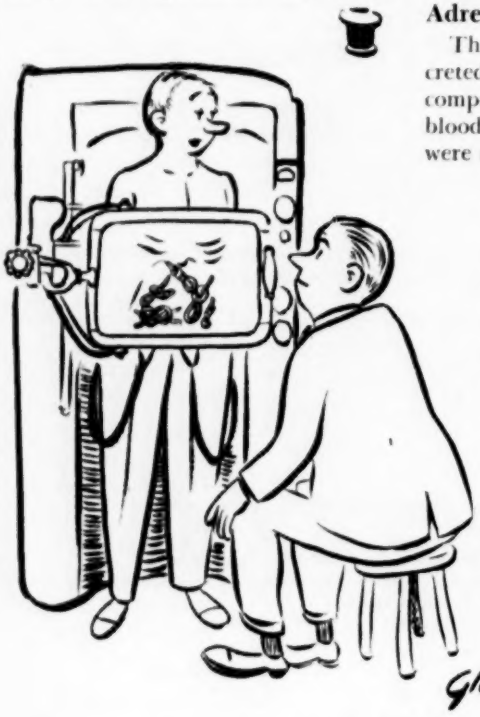
Basic Science Briefs

PHARMACOLOGY

Testicular Atrophy from Testosterone

Although the testis atrophies during treatment with testosterone, tissue eventually regenerates. Healthy men were given 24 to 91 daily doses of 25 mg. by Dr. Carl G. Heller, Portland, Ore., and associates. Immediately after the course Leydig cells were lacking, seminiferous tubules were hyalinized and much smaller, and germinal elements inactive or necrotic. Effects of 3 to 7 testosterone pellets of 75 mg. each were less severe. Six months after treatment some repair was noted, and in seventeen months recovery was complete. Moreover, tubular hyalinization seen before therapy had disappeared.

Prog. Assoc. Study Int. Secretions, June, 1950, pp. 27-28.



"I feel all knotted up inside!"

EXPERIMENTAL MEDICINE

Adrenal Activation by ACTH

The principal adrenal steroid secreted after injection of ACTH is compound F. Hormone levels in blood from adrenal veins of dogs were determined by Dr. Don H. Nelson and associates at the University of Utah, Salt Lake City. Increase of 17-hydroxycorticosterone was at first associated with greater blood flow. No significant amount of cortisone was found.

Prog. Assoc. Study Int. Secretions, June, 1950, p. 20.

TREATMENT

DCA for Hypotension

Daily doses of 20 mg. of desoxycorticosterone acetate and 10 mg. sodium chloride increase the level of blood pressure in hypotensive patients 15 mm. of mercury systolic and 10 mm. diastolic. Drs. Rolf Luft and Bjorn Sjogren of Serafimerlasarettet,

when a Lozille is dissolved slowly in the buccal sulcus...

The antibacterial action
is powerful...

The antibiotic
is nontoxic...

The "sore throat" relief
is sustained...

LOZILLES ***Tyrothricin-propesin lozenges***

Pleasantly flavored, each Lozille contains 2 mg.—an effective dosage—of tyrothricin, and 2 mg. of propesin for prompt, prolonged analgesia. Bottles of 15.

WHITE LABORATORIES, INC., Pharmaceutical Manufacturers, Newark 7, N. J.

Stockholm, Sweden, successfully employ DCA in pellets for severe orthostatic hypotension. With elevation of blood pressure to normal values, symptoms are completely relieved.

Prog. Assoc. Study Int. Secretions, June, 1950, pp. 42-43.

DIAGNOSIS

Test for Hyperthyroidism

Intravenous injection of 50 to 100 microcuries of radioactive iodine quickly gives an accurate idea of thyroid function. Using a Geiger counter, Dr. Joseph P. Kriss of Stanford University, San Francisco, noted 23 to 72% uptake in one hour by hyperactive glands, with the highest rate in the first ten minutes. Normal or benignly enlarged thyroids absorbed only 4 to 11% of the dose, largely in the first five minutes. Values probably represent trapped thyroid iodide, eliminating factors of gastrointestinal absorption, protein binding, and thyroid hormone turnover.

Prog. Assoc. Study Int. Secretions, June, 1950, pp. 22-23.

"Something odd about that doctor. All of his patients seem to be women."

PHYSIOLOGY

Sex Organ Stimulation from Wheat Germ Oil

Specially processed wheat germ oil given orally or subcutaneously has direct effect on the sex organs of rats. Whether the action is due to other than androgenic, estrogenic, or combined effects is still to be determined. Dr. Ezra Levin and associates, Monticello, Ill., injected 0.5 cc. on alternate days for eight days into hypophysectomized immature female rats. Adrenal cortex was maintained, follicular maturation stimulated, and luteinization produced. Testosterone and estradiol had similar effects and sesame oil none.

Prog. Assoc. Study Int. Secretions, June, 1950, pp. 17-18.

BIOCHEMISTRY

Hyperglycemic Factor in Crude Pancreatic Proteins

A by-product of insulin manufacture, 15% sodium chloride supernatant, has definite hyperglycemic power. Properties of several protein fractions were determined by Drs. Louis A. Kazal and coworkers of Sharp and Dohme, Inc., Glenolden, Pa., before and after alkaline inactivation of the contained insulin. Hyperglycemia was induced in rabbits by intravenous or subcutaneous injection. In some instances, repeated subcutaneous doses resulted in hypoglycemia and convulsions. The hyperglycemic factor reversed the hypoglycemic effect of insulin in rabbits but did not protect mice against insulin-induced convulsions.

Proc. Soc. Exper. Biol. & Med. 74:8-11, 1950.

1 ONLY SIMILAC IS NEEDED

whenever possible . . .

BREAST FEEDING

as long as possible . . .

or

SIMILAC

so similar to human breast milk that there is no closer

equivalent

1. Saves time and money—one can of Similac supplies 116-oz. of formula—20 calories an ounce at an average cost of less than 9/10ths of a cent per ounce.

2. Saves time and money—no milk modifiers needed with Similac; its higher vitamin content must be considered; helps avoid costly complications of ordinary formula feedings.

3. Saves time and money—easily prescribed, easily prepared—simply 1 measure of Similac to 2 oz. of water

SIMILAC FOR GREATER INFANT FEEDING VALUES

2 BABIES THRIVE ON EASILY DIGESTED SIMILAC WITH ITS ZERO CURD TENSION

3 SAVES YOU TIME

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three essentials...in the effective treatment of biliary dysfunction

are combined in Caroid and Bile Salts Tablets.

They afford a desirable threefold action as—

K
choleretic...to produce increased bile flow

Q
digestant...to assist digestion

J
laxative...to induce peristaltic action and help reestablish normal function.

Caroid and Bile Salts Tablets have been a prescription favorite for many years as an effective aid in the treatment of biliary stasis, cholecystitis, constipation of biliary origin. Available in bottles of 20, 50, 100, 500 and 1000.

tablets of... **Caroid and Bile Salts** with Phenolphthalein

American Ferment Company, inc. 1450 Broadway, New York 18, N.Y.

trial supply on request

ENDOCRINOLOGY

Effect of ACTH on Urinary Steroids

Administration of relatively large doses of ACTH causes a pronounced change within six hours in the excretion of all the recognized adrenal steroid metabolites. Intramuscular doses of ACTH ranging from 60 to 210 mg. given in a twenty-four-hour period to 6 volunteers raised the excretion of urinary steroids in about every instance. Urinary neutral 17-ketosteroids increased 44 to 105% during administration of ACTH, report Dr. Eleanor H. Venning and associates of McGill University, Montreal. Excretion of βOH-17-ketosteroids also was raised. Other increases: glucocorticoids, 72 to 565%; corticoids, 40 to 480%.

J. Clin. Endocrinol. 10:583-593, 1950.

RADIOAUTOGRAPHY

ACTH in Adrenal Cortex

Adrenocorticotropic hormone tagged with radioactive iodine and injected into the heart passes at once into the adrenal cortex and remains in rapidly decreasing amounts for about two hours. After administration to different male rats of ACTH, iodide, and serum albumin each labeled with I^{131}, organs were assayed at several time intervals by Dr. Martin Sonenberg and coworkers of Sloan-Kettering Institute for Cancer Research and New York University, New York City. Smaller proportions of iodide than of ACTH entered the adrenals and much less of serum albumin.

Prog. Assoc. Study Int. Secretions, June, 1950, pp. 18-19.

EXPERIMENTAL MEDICINE

Mechanism of Hypertension

Experimental hypertension from constriction of the kidney is probably due to altered hemodynamics or tissue tension with liberation of a pressor substance by the injured organ. Dr. L. J. Rather of Stanford University, San Francisco, induced hypertension in young rats within four days by removing a kidney and binding the other with a silk figure-of-eight ligature. Blood pressure was unaffected by unilateral nephrectomy with exposure and handling of the opposite kidney, by figure-of-eight ligature of one and exposure of the other, or by removal of one organ and three-fourths of the other. Thus hypertension does not depend on amount of renal tissue destroyed, fibrous perinephritis, or prevention of renal hypertrophy.

J. Exper. Med. 92:59-76, 1950.

ENDOCRINOLOGY

Growth-Promoting Hormone

General tissue growth can be produced without concomitant genital activity by a little-known hormone, methyl androstenediol. Dr. Gilbert S. Gordan and associates at the University of California, San Francisco, tested the effect of the hormone on atrophic levator ani muscles of castrate male rats. In doses of 1 mg. per kilogram, myotropic power equaled that of the androgens, and only with inordinate amounts of 50 mg. per kilogram was androgenic action noted.

Prog. Assoc. Study Int. Secretions, June, 1950, pp. 16-17.

"... there is the fallacy, still prevailing, that gout is a rare disease ..."†

McNEIL LABORATORIES, INC. • PHILADELPHIA 32, PA.

†Finn, N., Brit. M. J. (Nov. 26) 1949

THE "OVER 40" ARTHRITIC

Many a case of painful arthritis in the "over 40" age-group—those most susceptible to gouty arthritis—will respond to Cinbisal.

Cinbisal combines colchicine with salicylate—both effective in producing urate diuresis and relieving arthritic pain. Inclusion of a protective dose of ascorbic acid assures adequate replacement of this essential factor during salicylate therapy.

EACH TABLET CINBISAL CONTAINS:

Colchicine	0.25 mg. (1/250 gr.)
Sodium Salicylate	0.3 Gm. (5 gr.)
Ascorbic Acid	15 mg.

SUGGESTED DOSAGE:

One or two tablets every four hours.

SUPPLIED: Cinbisal is available in bottles of 100 and 1000 tablets (Engestic® coated green).

Samples on request.

CINBISAL*

'McNEIL'

*Trade-Mark of McNeil Laboratories, Inc.

Washington Letter

(Continued from page 42)

Medical Services, because the Army and Navy were closing hospitals which were deemed unnecessary. But because the hospitals were shut down, almost 400 physicians were on the surplus list by July 1, ready for assignment to the Far East or to care for casualties returned to this country for treatment.

Hospital facilities in this country and abroad had been drastically reduced in the previous year, but even in this respect the services seemed prepared to take care of the initial wartime load. Of the remaining 37,000 staffed beds in military hospitals, military personnel were occupying 19,000, military dependents 3,000, and VA cases 3,300. This meant that almost 12,000 beds were ready and waiting, properly staffed, and in modern, efficient hospitals, when the first casualties came in from Korea.

In addition, something like 50,000 mobile beds were available in the same hospitals, but staffs had to be provided.

The doctors and hospital beds could not handle a full wartime flow of patients, nor was it designed that they should. But the situation was adequately handled while more physicians were being brought into service and more hospital beds made available.

First intensive efforts to get more physicians into Army, Navy, and Air Force threw light on the unusual status of two groups of men. The larger is made up of former V-12 (Navy) and ASTP (Army) medical students, who got all or part of their education at government expense, then were made free agents at the end of World War II. Those who graduated from these programs during the war immediately went on active duty, but the later graduates were under no obligation. Probably the number of postwar graduates is in excess of 6,000. If only half these men should be brought into uniform, they could provide medical attention for almost 1,000,000 military personnel.

The second group is much smaller, but still significant. It comprises physicians who, during the first three years after the war, accepted military internships or residencies but left the services as soon as they had finished these assignments. Like the V-12 and ASTP men, they received training from the government but generally have not served in an active capacity. For the last two years, military residencies and internships have carried the requirement that doctors accepting such appointments continue active duty for a period equal to that of the training period.

All medical reserve officers have been placed on mandatory call. By mid-September 734 physicians will have received orders to report for active duty on Oct. 1. Additional doctors will be called as needed. Names will be selected by the Continental Army commands in consultation, when possible, with county and state societies and the senior reserve officers in the area. Quotas will be proportional to the physician density in each area.

(Continued on page 104)

on the COURSE

to bounding health...

with Citrus Fruits and Juices

The rich variety of nutrient factors* in citrus fruits and juices, and their high content of vitamin C and natural fruit sugars,[1] are medically noteworthy — for several reasons: they contribute helpfully to improvement of appetite[4] and digestion,[5] to greater bodily energy[6] and stamina,[6] and to resistance to disease.[3] During pregnancy or lactation, before or after surgery, and for general nutritional support from infancy to old age, the refreshing goodness of low-cost, readily-available Florida-grown fruits and their juices proves universally appealing . . . whether in fresh, canned, frozen or concentrated form.

FLORIDA CITRUS COMMISSION
LAKELAND, FLORIDA

*Among the richest known sources of vitamin C are the citrus fruits. They also contain vitamins A, B, and P, and readily assimilable natural fruit sugars—together with other factors such as iron, calcium, citrates and citric acid.

References: 1. Gordon, E.S.: Nutritional and Vitamin Therapy in General Practice, Year Book Pub., 3rd ed., 1947. 2. Manchester, T.C.: Food Research, 7:394, 1942. 3. McLester, J.S.: Nutrition and Diet, Saunders, 4th ed., 1944. 4. Rose, M.S.: Rose's Foundation of Nutrition, rev. by MacLeod and Taylor, Macmillan, 4th ed., 1944. 5. Sherman, H.C.: Chemistry of Food and Nutrition, Macmillan, 7th ed., 1948.

FLORIDA

Oranges • Grapefruit
Tangerines

David Marine 1880–

David Marine was born at Whitelysburg, Maryland, on September 20, 1880. He received his A.B. degree from West Maryland College in 1900 and his A.M. in 1901. He graduated from the Johns Hopkins Medical College in 1905 with an M.D., and then served as resident pathologist at Lakeside Hospital, Cleveland, from 1905 to 1907. Between the years 1907 to 1920 he was successively Assistant Instructor, Assistant Professor and Associate Professor of Experimental Medicine at Western Reserve University. In 1930 he received an honorary Sc.D. from Western Reserve. He was Director of Laboratories at Montefiore Hospital, New York, from 1920 until he retired in 1945. From 1920 to 1938 he was also Assistant Professor at Columbia University Medical College. Dr. Marine was awarded the medal of the New York Academy of Medicine in 1931.

Dr. Marine added much to our knowledge of endocrine glands, their secretions, and their disorders. He is best known, however, for his outstanding contributions on the thyroid gland. For it was he who demonstrated the relationship of iodine to the structure of that organ. His researches led to the wide-spread use of sodium iodine as a goiter preventative for children in the Middle West and Switzerland, with a gratifying reduction in thyroid disease in those areas.

First shots had hardly been reported from Korea before the changed situation was noted by witnesses before congressional committees. This was strikingly apparent in hearings on bills to create a united medical administration, which would take in all government general hospitals, including VA and military, and all other health activities.

Testifying before a Senate committee, Dr. Leonard G. Rowntree, American Legion's chief medical advisor, said:

> I can visualize the calamity that would face our military medicine if such a major change in one of the great federal programs were to be added to the other military problems now before us. The whole Far Eastern plans of our government . . . strengthen our request that Congress reject [the united medical administration bill] and proceed with the creation of a new Federal Board of Hospitalization.

Another witness before the same committee was Tracy S. Voorhees, chairman of the Hoover Task Force on Federal Medical Services and former assistant secretary of the Army. He too recognized the crisis and believed it emphasized the need for immediate creation of a united medical administration. He said that doctors must be used more efficiently than in the past and that a unified hospital program would provide the necessary control and guidance.

No effort was made to get action on the united medical administration, but the issue will come up again.

Fighting in Korea also was one factor in defeat of Presidential Reorganization Plan 27 by the House.

Had this plan been approved the Federal Security Agency would have been made a department of health, education, and security. Opponents of the change had only slight hope that the House would reject it and were preparing to carry on their major fight in the Senate. However, representatives defeated the measure 249 to 71.

Washington Notes

► Commerce Department says that the physicians' income survey probably will be the most accurate poll of this type ever conducted. Returns already are 10 times the number necessary for statistically sound results.

► VA is in a running dispute with the American Legion and the Disabled American Veterans. The Legion says its survey shows only 19% of VA hospital cases are strictly non-service connected, whereas VA statistics set the proportion closer to 75%. VA Administrator Carl R. Gray maintains that no service-connected injury or illness case is awaiting hospitalization. DAV lists thousands and claims about 1 out of every 4 cases awaiting beds is service-connected. At a Senate hearing, Gen. Gray avoided going on record on the touchy question of hospitalization of non-service cases. Replying to question by Sen. Taft, he said he "hadn't studied the situation."

► Two investigations are getting under way in health fields; a House committee is looking into the condition of the nation's food supply, and a Senate committee is attempting to separate fact from fiction regarding the extent of voluntary health insurance and of state and local health services.

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1. *Reeb, B. B., Rohr, J. H., and Colwell, A. R.: Proc. House Staff Dept. Med., Wesley Memorial Hosp., Chicago, Ill., Feb. 6, 1948.*

2. *Rohr, J. H., and Colwell, A. R., Proc. Amer. Diabetes Assn. 8:37, 1948.*

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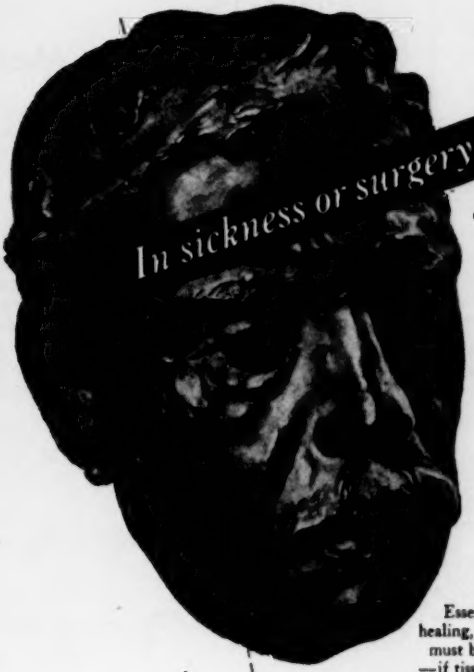

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REFERENCES: 1. Coller, F. A. and DeWeese, M. S.: Preoperative and Postoperative Care, J.A.M.A., 141:641, 1949. 2. Jolliffe, N. and Smith, J. J.: Med. Clin. North America, 27:467, 1943. 3. Kruse, H. D.: Proc. Conf. Convalescent Care, New York Acad. Med., 1940.
4. Spies, T. D.: Med. Clin. North America, 27:73, 1943.

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"Show? No, we didn't have time for a movie. We came right to the hospital because I am going to have a baby."—E.M.S.D.

"I love to travel. Had an appendectomy in Boston, a tonsillectomy in Los Angeles and my gallstones out in Miami."

Down to Earth

A couple of weeks before I was to read a paper before the New Mexico Public Health Association, I was asked for a biographical sketch to put in the program. I sent along the usual data. The surprise came when I arrived at the meeting and saw the résumé of my life history entitled "A Biological Sketch."—J.P.W.

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"Now, now," I said, "why do you say that?"

"You just waited until mama got good and sick," he said, "and then you brought an old baby for her to take care of."—G.D.B.

"Sure I know the difference between amnesia and magnesia," grinned the student nurse. "If you have amnesia you don't know where you're going."—T.Z.

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A young woman, whose sister had recently become the mother of twins, called at my office complaining of vaginal burning and itching. The diagnosis was trichomoniasis, which I explained was caused by a parasite. The next time she saw her sister, the patient said, "Here you have a pair of twins and all I have is a parasite."—H.S.S.

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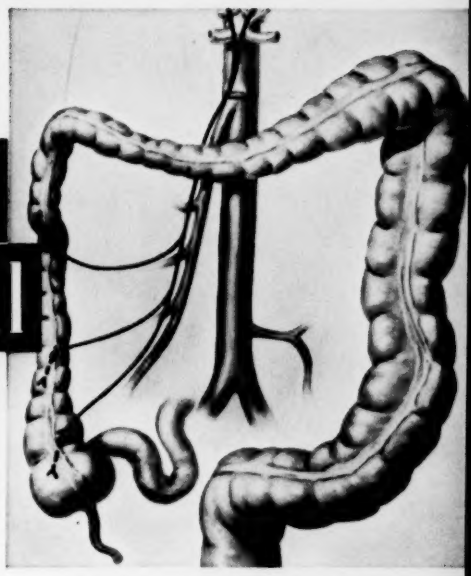

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